

Overseas continued

The New South Wales Institute of Technology Sydney, Australia

The New South Wales Institute of Technology at its central location in Sydney is a corporate institution for higher education established to provide a wide range of professional courses for those entering or already employed in industry, government and technological fields. Applications are now invited for the following senior academic positions:

FACULTY OF BUSINESS STUDIES

The Faculty of Business Studies currently offers a Bachelor of Business Degree with concentrations in accounting, marketing, operations management and public administration. In addition, in 1977 the Graduate Diploma in Accounting and the Graduate Diploma in Personnel Management/Industrial Relations were introduced and it is anticipated that expansion of graduate courses will proceed in the near future.

Three current enrolments within the Faculty approximate 2,600 students. Administration of the Faculty is organised into the four Schools of Accounting, Business and Public Administration, Finance and Economics, and Marketing. Appointments within the Faculty of Business Studies will be also invited from July, 1977 or January, 1978.

Head, School of Finance & Economics

The appointee to this Chair will be responsible for the academic leadership at the staff of the School and the day to day operation of the instructional and research work. As the Head of School, the appointee will be ex-officio a member of the Academic Board and the Faculty Board, and may be called upon in the future to assume the duties of the Dean of the Faculty.

The School anticipates offering an area of concentration within the Bachelor of Business Degree in Applied Economics. Further, a Graduate Diploma in Finance is being planned for production in the near future. The School will further be offering Finance & Economic subjects in other Graduate courses that are being offered within the Faculty of Business Studies.

The appointee should possess a Doctorate (or equivalent) and should have professional experience at an appropriate level in higher education in the Business Studies field. This experience will have been obtained by lecturing or administrative work in a Faculty of Business Studies at a recognised University or Polytechnic.

It is desirable that the Head of the School will have had substantial business experience. Alternatively the appointee may have served as a consultant to business or to government. Further information on conditions and method of application is given below.

Associate Head of School, Business & Public Administration

Applicants should possess qualifications at the Post-Graduate level in Business Studies and should have personal experience at an appropriate level in higher education in the Business Studies field. This experience will have been obtained by lecturing and/or administrative work in a Faculty of Business Studies at a recognised University or College of Advanced Education. Candidates with previous experience in business, government, or consulting will be given preference. A strong quantitative background is desirable and applicants with experience and preparation in Public Administration are especially encouraged to apply.

In addition to lecturing in his respective area, the appointee will advise the Head of the School of Business & Public Administration on the development and presentation of organisational, management and policy subjects taught by the Faculty. He will also be involved in certain administrative activities associated with the School of Business & Public Administration and may be asked to serve as Head of School as dictated by the requirements of the School of Business & Public Administration. Further information on conditions and method of application is given below.

Principal Lecturer in Business Law Department of Business Law School of Accounting

The Principal Lecturer in Business Law will provide academic leadership in the area of business law within the School of Accounting and may be asked to serve in the capacity of Head of the Department of Business Law for a fixed period of time subject to reappointment. Five core subjects and several electives are offered in Business Law. Two graduate diploma courses include business law subjects. The appointee will advise the Head of School in the review and further development of business law subjects as part of the Faculty's academic programmes. The appointee will also accept responsibility for administrative activities in areas such as syllabus services, student services and development of Faculty resources.

Applicants for the position should possess a Post-Graduate qualification in Law and considerable experience in the classroom and either in legal practice, in Government or as a corporate lawyer. In addition teaching experience in a University or other tertiary institution would be an advantage. Further information on conditions and method of application is given below.

FACULTY OF ENGINEERING

Principal Lecturer School of Mechanical Engineering

The appointee to this position will be expected to assist the Head of School in providing academic leadership in the School of Mechanical Engineering. The School is structured at the present time into Departments of Mechanical Engineering and Production Engineering and has an academic staff establishment of 25 members. The School presently has about 600 students and there is a small but rapidly increasing commitment to postgraduate education.

The appointee will, subject to the requirements of the Head of School, act from time to time as Head of the Department of Mechanical Engineering. It is anticipated that the successful applicant will have acquired a doctorate and substantial industrial experience. A genuine interest in continuing industrial liaison is essential to the School's course development.

The main fields of interest of the School of Mechanical Engineering are: Advanced Design, Dynamics, Biomedical Engineering, Control Engineering, Stress Analysis, Transportation, Turbomachinery and Viscoelastic Materials. Applicants may, however, have specialised interests in any suitable field of Mechanical Engineering. Further information on conditions and method of application is given below.

ACADEMIC SALARIES are under review but are currently as follows:

Table with 2 columns: Position and Salary. Head of School: \$117,327 (Approx.). Associate Head of School: \$82,728 (Approx.). Principal Lecturer: \$42,665-\$43,283.

With consent of Council, academic staff are permitted to undertake consulting work. Staff are encouraged to engage in research work in an area appropriate to their knowledge and experience. Fees and a contribution toward removal expenses and initial accommodation expenses are provided for overseas appointees. A Housing Loan Scheme is also available.

Applications close on May 13, 1977. Applicants should arrange for three confidential reference reports to arrive by the same date. Written applications should include: address; phone number; personal particulars; documentary evidence of qualifications; work and teaching experience; affiliations; publications; research work undertaken; and the names and addresses of the three referees contacted. Applications and reference reports are to be sent to:

The Office Secretary, New South Wales Government Offices, 45 The Strand, London, W1A 1LZ, ENGLAND.

THE CHINESE UNIVERSITY OF HONG KONG

Senior Lectureship/Lectureship in Pure Mathematics, Lectureship in Mathematics (Statistics), Annual Salary: £15,390 and above. Professor: £11,782-£14,902 (by 8 increments). Reader: £8,907-£9,880 (by 8 increments). Senior Lecturer: £10,710-£14,437 (by 8 increments). Lecturer: £8,907-£9,880 (by 2 increments) or £8,295-£11,595 (by 7 increments).

Qualifications for Appointment: Candidates for Chair should be of high academic standing with proven contributions/publications of merit and should be able to provide leadership in the teaching and research programmes in his field.

Head of the Department of Food Technology Queensland, Australia

Queensland Agricultural College is a multi-disciplinary College of Advanced Education with modern, well equipped facilities, located some 20 kms from Brisbane, the state capital.

This is a senior appointment within the School of Food Studies (one of three schools) which offers degree and diploma courses for the food processing, catering, food and tourism industries.

You will have appropriate academic qualifications together with relevant academic, research and/or industrial experience. Qualities of initiative and leadership, sound administrative ability and an appreciation of educational philosophies and practice in advanced education are also important, and you will be involved in the general development of this expanding School.

Salary will be \$24,971 per annum. Applications, with full details of name, date of birth, marital status, qualifications, present employment, experience and the names of two referees, to reach the Agent General for Queensland, 292 Strand, London WC2R 0LZ, not later than May 28, 1977.

General Vacancies

London College of Printing

Elephant and Castle, London, SE1 6SB.

Department of Business and General Studies

Principal Lecturer in Communications Studies

Applicants are invited from graduates who have experience of some aspect of the Communications field or have studied in depth some aspect of the Communications process. The ideal applicant should have teaching, industrial or research experience.

The person appointed will take responsibility for the flourishing HND Business Studies Course (Communications Studies stream) and the development of our present degree course in Communications Management. He may also teach relevant aspects of the subject on our other degree courses in the Design and Philosophy fields.

ilea Further particulars and application form (returnable by 20th April, 1977) obtainable from the Senior Administrative Officer at the College.

Librarians

OXFORD: SALMO COLLEGE, OXFORD, OXFORDSHIRE. The College proposes to elect a Librarian. The task is to manage and develop the library and to provide a service to the staff and students. The successful candidate will be expected to have a degree in Library Studies or a related subject and to have had at least two years' experience in a library. Applications should be sent to the Librarian, Salmo College, Oxford, OX2 0JL, ENGLAND.

Awards

LONDON, N.W.1: JUNA OLLE-PENNER MEMORIAL, TRUSTFOND. The Trustfonden is a fund established to support research in the field of linguistics. The successful candidate will be expected to have a degree in Linguistics and to have had at least two years' experience in research. Applications should be sent to the Trustfonden, Juna Olle-Penner Memorial, Trustfonden, Box 10, S-102 22 Stockholm, SWEDEN.

Applications are invited for the following academic openings in 1977-78: Chair: 1. Professorship/Readership in Marketing. 2. Professorship/Readership in Geography. Officers: 3. Readership/Senior Lectureship/Lectureship in Chinese History & Politics to teach respectively: (a) History of modern China, with emphasis on China's international relations; (b) Chinese historiography and/or Chinese historical geography; (c) Ming-Ching history and Sino-Russian historical relations. 4. Senior Lectureship/Lectureship in World History (ancient & medieval European history).

THE TIMES Higher Education SUPPLEMENT

April 8, 1977, No. 285

Price 18p

Student tally in 2000 'will be the same as now'

by Judith Judd

Universities and polytechnics were advised to assume that there would be the same number of students in higher education in the year 2000 as now, and then accordingly, by Mr William Gutteridge, director of complementary studies at Aston University, this week.

He told this evening Research and Advisory Centre conference at Bournemouth College, Reading, that observers had been too gloomy in their predictions of numbers in the 1990s.

It is usually pessimistic to say that universities and polytechnics will go to the same way as the colleges of education in the 1970s.

Though population graphs showed there would be 200,000 fewer 18-year-olds in 1994 than at present, this figure would certainly be modified. The proportion of school leavers pursuing a level had been rising and could be as high as 24 per cent in 1994. After that, the number of 18-year-olds would not plunge to zero and, indeed, was likely to rise.

Policy was based on the assumption that numbers in 2000 would be roughly the same as now. The problem of colleges of education, of mad increases and catastrophic decline would arise again.

Higher education would alternate between periods when budgets seemed tight and periods when they seemed easier. But this is a long way from trying to match all the fluctuations in population size.

For the colleges and institutes of higher education, Professor Gutteridge saw a loss certain future. "I don't think we should assume that many of the institutes are going to get off the ground in the capacity of institutes of higher education. They are going to have little alternative but to help accommodate on a short-term basis some of the demand which arises from the rising student population until 1984."

Then they would have to look to community and adult education, or, perhaps, would become sixth form colleges.

Polytechnics and universities would feel the squeeze in the immediate future. They must expect worsening of staff:student ratios, lengthening of the teaching day and the reversion to longer terms.

A number of universities would never reach their optimum size this century. Some polytechnics might well have to become more involved with further higher education. The effect of all this would be increased emphasis on the binary line.

More from CRAC, page 3



Mr William Gutteridge

Universities expect 295,000 students by end of decade

by Frances Gibb

The universities should have well over half the service target of 560,000 students in higher education by 1980/81, according to the University Grants Committee. In a letter to all universities last week, telling each its share of the total £52 billion grant for next year, the UGC said student numbers were expected to grow by more than five per cent between 1977/78 and 1980/81. But there would not be a pro rata increase in resources.

Numbers next year are expected to be 281,000. A five per cent increase would bring them to more than 295,000 by 1981, well over half the target and differing from the 1972 White Paper. A programme for expansion, which said the number of places in higher education should be divided evenly between the two sectors.

The UGC said it would be writing again to give guidance on planning for the next three years, in view of the provisional total recurrent grants for those years announced by the Secretary of State last week. It encouraged spending more on vacation study and field courses, which the UGC says, have fallen as a proportion of total recurrent expenditure and indicated that universities might be able to reduce the allocations for maintenance of minor works, in relation to health, fire and safety.

On the equipment grant, the UGC advised special consideration for computing science in mathematics, and departments dealing with subjects which have recently become more experimental based, and which are tied to the manufacturing and process industries.

Universities have been told that the recurrent grant now includes items not previously covered, such as payment for the postgraduate certificate of education and the surcharge on the university pension fund. There is also provision (undisclosed) for tuition fees to be waived in certain cases of hardship.

Some universities have been told that they should expand in certain areas, or that certain subjects should be protected. Cambridge, for instance, has been told that provision has been made in its grant for maintaining the level of spending on veterinary studies.

Essex has been encouraged to support electrical engineering and some sciences, and Aston has been encouraged to expand its management centre and interdisciplinary higher degrees in technology and management.

What they get

UNIVERSITIES' GRANTS 1977/78 (£ millions)

Table with 4 columns: University, Grants, Recurrent, and Maintenance. Includes rows for Aberdeen, Aston, Bath, Birmingham, Brunel, Cardiff, City, Dundee, Edinburgh, Essex, Exeter, Glasgow, Heriot-Watt, Hull, Keele, Lancaster, London, Loughborough, UMIST, Newcastle, Nottingham, Reading, Sheffield, Strathclyde, UCL, Warwick, York, and Yorkshire.

Learn-at-work plan

Last week in Paris the Organisation for Economic Co-operation and Development held a four-day conference on recurrent education which had recurrent education which had marked change from most previous conferences. This time the focus was on the concept of recurrent education, so that they could undertake it later on the basis of work experience; the age structure, and hence the management and teaching styles of institutions might change in consequence.

There was considerable discussion of the practicality of reintroducing adults to upper secondary institutions where they could study side-by-side with teenagers. Experience in New Zealand and elsewhere suggested that the barriers to this were not as insuperable as they are sometimes imagined to be in Britain, but it was recognized that such provision failed to attract the "losers" of conventional education systems.

On the other hand, as spare capacity began to appear in the secondary systems of most member countries, there was a powerful economic case for continued experiments in this area.

A second working group considered the financing of recurrent education. There was agreement that a system of paid educational leave, for which institutions already existed in France and Sweden, as well as being required by an ILO convention of 1974, would be desirable.

The balance of opinions, as between employers' employees and general, would clearly depend on the political stance of each country. But everywhere there would be necessary to minimise the displacement of existing private industry by additional public expenditure.

Full report page 2

Research councils' income cut by three per cent

by David Walker

The 1977-78 income of the research councils will be three per cent less than last year, according to the settlement announced by the Advisory Board for the Research Councils this week.

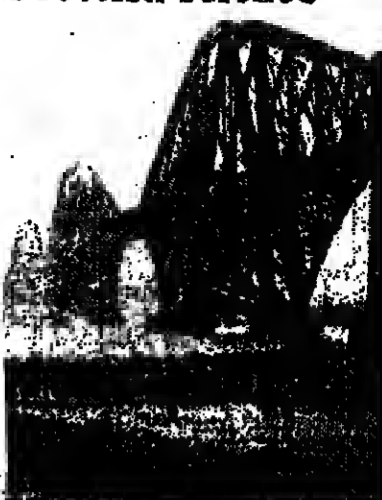
Mr Frederick Stewart, the board's chairman and regius professor of ecology at Edinburgh University, said that the increase in the council's budget necessary to cover the new level of tuition fees in universities and colleges, the growth in its budget was less than two per cent in the last year. The Agricultural Research Council and slightly less than the Natural Environment Research Council.

Mr Robinson added that the SRC does a great deal of work relevant to British industry. There has been a steady decline in the SRC's income in the direction of serving the needs of industry.

The SRC also announced new growth targets for the various research councils in the next five years. These reflect the move away from supporting large-scale and expensive research at home instead of relying on international facilities. The figures are: ARC 1.5 per cent annual growth from 1976-77; HL 1.5 per cent; SRC 1.5 per cent; NERC 1.5 per cent; SERC 1.5 per cent; SRC 1.5 per cent.

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On the other hand

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Swansea: Peter Scott and Frances Gibb report from the Conference of University Administrators How the binary policy and Mrs Williams's Department heads to be 'managers of resources'

Four hundred and fifty university administrators, 65 meetings of specialist groups discussing everything from the future of higher education to photocopies, and the champagne-like weather of Swansea Bay which switched rapidly from driving downpour to pale sunshine and gales, were the essential ingredients of the CUA conference.

The full timetable of group meetings kept the delegates hard at work for most of the time the weather made sure that they stayed there in spite of the attraction of the nearby Gower peninsula.

A lighter diet was provided in two plenary sessions when they were allowed time off from vigorous participation. On Friday morning an 'Any Questions?' session was held with the panel Professor Glenmor Williams, vice-principal of the University College of Swansea, Mr Laurie Sapper, general secretary of the Association of University Teachers, and Mr Peter Scott, editor of *The Times*.

Questions ranged from what the panel thought of the binary policy (a test of diplomacy) and Mrs Williams's 13 points (a test of memory) to the more pertinent concerns of administrators, such as industrial democracy.

Industrial democracy is a particularly lively concern for administrators because they are in the front line. They are drawn to by the enthusiasm of their status within universities, with senior administrators throwing in their lot by and large with the academics and junior staff regarding themselves as likely to be employed.

Students' needs 'must be put before research'

by Judith Judd

Students' growing consumer power will require beneficial changes to higher education curricula, Professor Tony Becker, of Sussex University's School of Education, said this week.

Speaking at the Careers Research and Advice Centre conference at Bournemouth College, Reading, Professor Becker said the new fee structure and the falling birth rate would increase the need to provide curricula attractive to students.

In higher education to *The Good Food Guide*.

Earlier Professor Becker stocked the lack of discussion about higher education curricula, apart from institutions' individual systems of examination, one reason for this was the tradition of privacy which had grown up around the activity of teaching in higher education.

Most academics regarded themselves as subject-matter experts, and saw the curriculum as little more than a list of syllabus topics unrelated to issues of how it was taught and assessed.



Dr Malcolm Gavin, former principal of Chelsea College, London, points to a row on the wall of the opening of the Malcolm Gavin hall of residence on the college's new site in Tooting on April 1.

Battle over changes plan at Huddersfield Polytechnic

by Sue Reid

An attempt by Kirklees Council to alter the membership of Huddersfield's governing body to allow increased industrial representation is being vigorously opposed by the college's governors, staff and students.

The Huddersfield branch of the National Association of Teachers in Further and Higher Education and the polytechnic's governing body, academic board and students' union, have each condemned the local authority's proposed changes to the college's instrument of government, now under consideration by the Department of Education and Science.

The governors, students, and NATFHE's governing body from industry and commerce, including two from the trades unions. They also want five members of the full-time teaching staff on the governing body, instead of two.

The Conservative-controlled council's support of a scheme put forward by a small working party of college governors, including two local authority representatives. The union, governors and students are backing a different set of proposals which would reduce the industrial representation on the governing body and allow lecturers to be elected as governors by the staff assembly.

'New vocationalism' call to universities

A dedication to a "new vocationalism" by universities was the keynote of the address to a plenary session of the conference by Gerry Fowler, MP, formerly Minister of State at the Department of Education and Science responsible for higher education.

Mr Fowler said that universities should pay more attention to the need to develop post-experience courses. They should also teach closer courses with schools so that six-formers could be advised not only about the academic potential of university courses but also the vocational to which they might lead.

The idea that investment in people was as important as investment in plant was no longer as popular as it was 15 years ago. Although the sector in higher education felt that in the present despite the odds of future hope he remained doubtful.

On the theme of his address, university education in conditions of severe recession was the topic of Mr Fowler's address. He said it was imperative for universities to look at the more effective use of highly expensive manpower. First, there must be some rationalisation and co-ordination between institutions and this immediately raised the question of their traditional autonomy.

Second, teachers might have to collaborate more by using teaching materials prepared by other teachers as well as by themselves. He gave the example of the Open University's successful methods of course preparation.

Overseas student fees rise is selfish, Tories are told

by Judith Judd

The increase in fees for overseas students to the next academic year has been attacked by Mr Norman St John-Stevens, the Opposition spokesman on education.

He said the Federation of Conservative Students at Egham this week that the increases were misguided and selfish. "It is right that the cost of living should be taken into account," he said.

He criticised the new tuition fees scheme as a whole, particularly the increase for postgraduate students, many of whom pay their own fees. "The result will be that thousands of postgraduate students will have to stop their studies and thousands will not be able to start. Universities now expect to lose at least 60 per cent of their 15,000 postgraduate students next year."

Mr St John-Stevens said the autonomy of the universities was threatened by the scheme. "It has been calculated that the amount of income from fees will increase from a present 20 per cent to 30 per cent."

He said the Government should be asked to consider the effect of this increase on the next academic year. "The effect of this will be to make the next academic year a year of increased expenditure on education institutions even more dependent upon direct State aid."

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Cambridge is just the job

Last year was a good year for institutions seeking recruits among the graduates of Cambridge University, according to the annual appointments board report issued this week.

The number of Cambridge BAs who entered manufacturing industry was twice the 1975 figure and the appointments board staff have detected a positive change in attitude on the part of students.

The staff have been aware of a much more active interest in industry, a much more general feeling that the most academic year of the under-graduates to include manufacturing in their list of worthwhile and useful work, the report said.

TSA to fund shortage courses scheme

Details of plans to train up to 1,500 extra teachers in shortage subjects during the next academic year first announced in the Budget speech, were released by the Department of Education this week.

The programme, currently being discussed with the local authority associations, will be financed through the Training Services Agency, with support from central government funds.

OU in Schools Council link

The Open University and the Schools Council are planning to launch a post-experience course for teachers which will examine course curriculum developments and student monitoring techniques.

Talks initiated by the Schools Council are now under way. The course will be produced and broadcast by the Open University, but planned by a joint team of educators.

Paris: Sue Reid on a recurrent education conference American professor puts further education 'entitlement' plan

A suggestion that continuing education should be financed through a system of "drawing rights" to enable students to finance their education in Paris last week. The conference on Development of Recurrent Education was organised by the Centre for Recurrent Education and the International Organisation for Economic Co-operation and Development.

Professor Henry Levin of Stanford University presented a preliminary discussion paper calling for a basic framework for financing recurrent education. He commented on the system of financing recurrent education in the United States and Western Europe, claiming that funding institutions rather than students directly led to shortcomings in continuing education.

Under the present system, those who receive the largest financial subsidies for further education and training are those who are eligible to attend the universities and other costly components of the education system while those who are unable to attend are those who are eligible to attend the universities and other costly components of the education system.

Professor Levin said it was clear that the upper social classes were most likely to receive the high public subsidies reflected in university training. People in the lower social classes received little or no government subsidies for the post-compulsory education and training period.

To a large extent, the lower social classes were either ineligible for the subsidised compulsory education and training programme or else were prevented from doing so by limited family resources, he claimed.

Anglican college closures threat to Oxbridge

by David Walker

The end of Oxford and Cambridge as major centres of training for the Anglican ministry is predicted in an official Church of England report issued this week.

The report on the future of theological training, signed by three bishops, recommended the closure of up to eight Anglican colleges, including all but two of the concentration colleges of Oxbridge. The closures would be a part of a regional reorganisation of training.

The report, by the bishops of Guildford, Bristol and Gloucester, will be fully discussed within the church's institutions. The Archbishop of Canterbury has asked a diocesan bishop in each region to convene a representative meeting to consider its proposals.

NEXT WEEK

Believing in the British Library. Gareth Stedman Jones reviews the second volume of *Evans Kopp's* biography of Elizabeth Marx.

Eric Burhop on particle physics. John Sparke on technology at the Open University. Michael Gibbons at Slesco.

ACCESS TO HIGHER EDUCATION: IMPLICATIONS FOR INTERNATIONAL MANPOWER PLANNING. Conference dates: MAY 19-20, 1977. Northeastern University, Boston, Massachusetts. For further information and registration form write: Centre for International Education, Northeastern University, Boston, MA 02115.

801/10/11/77

Current prices push Government savings target up to £60m

by Frances Gibb

The Government is committed to saving at least £60m from further and higher education by 1978-79, possibly from tuition fees, civil servants from the Department of Education and Science revealed this week.

At a press conference in London dealing with grants for students and universities, it was announced that the £42m that the Government is committed to saving in higher and further education in the next two years was expressed in 1975 prices. At 1977-78 prices the figure was £60m.

So far, £28m of the £42m for Wales and £20m of the £42m for the university sector, by higher tuition fees.

Mrs Williams, the Education Secretary, said recently that she was prepared to meet vice-chancellors to discuss other ways of saving the additional £14m (or nearly £12m in 1977-78 prices).

Several more universities have recently issued statements, condemning the increases for 1977-78.

A warning that any attempt to raise fees further in 1978-79 would have "catastrophic repercussions" was made by Mr John Butterworth, vice-chancellor of Warwick, in an address in Warwick University court.

Not only would one make of able overseas students suffer, but irreparable damage would be caused to two categories of students whom the university has taken special care to nurture: the mature students and the postgraduate students the great majority of whom are fully financed themselves but are strongly motivated and anxious to return to society to play a more responsible part.

The council of the University of Wales said last week that it "regretted that more socially acceptable means of raising income rather than by the increase of fees had not been adopted."

Brunei University council has decided that if the recurrent grant permits it will remit the whole or part of the differential in fee levels between new self-financing home and overseas students.

Warwick University will survive 1977-78 without any need for staff redundancies, Mr John Butterworth, the vice-chancellor, told the university court this week.

Presenting his annual report for 1975-76, Mr Butterworth said that the university had estimated possible savings of £250,000 in 1977-78. "We do not see jobs in danger; we think we shall survive without anything in the way of a general reduction scheme."

The university had also managed to institute six new academic posts in that year, he added.

He hoped the University Grants Committee letter about the recurrent grant would contain some indication about student numbers in 1981. With the completion of its new social studies building in October, Warwick will have the capacity to expand from its present 4,300 students to some 5,000 by 1983.

The university also had capacity in engineering, and given the staff and necessary facilities it would be likely to respond to the new expansion request.

Applications were buoyant, with almost 13,700 applicants for 1,300 places. Subjects which were particularly popular were law, business studies, engineering, mathematics and courses involving economics, English and history.

Among new subjects much interest had been shown in psychology, theatre studies, and environmental sciences. The physical sciences were responding more slowly.

The university council had recently approved a submission from a committee in the university

According to Dr Keith Hampson, secretary of the Conservative Parliamentary education committee, the Government will lose at least £8m as a result of its fees policy in 1977-78.

This figure has to be set against the Government's savings of £28m from the new fee levels, Dr Hampson says. "Not only is the fee policy extremely damaging, but it is also costing a lot of money."

He estimates that there will be a loss of some £4m at postgraduate level because of the reduction in self-financing students. At undergraduate level, he says, the Government has failed to take into account the number of students eligible for grants who had not budgeted to claim the £50 minimum, but now would, and their fees would also be paid. This might cost £2m.

There were also some 20,000 undergraduates at the minimum grant whose fees the Government now had to pay, which might cost another £2,500,000.

If the new system was going to cost so much more than the present system, the Government should consider abolishing fees for all home students, he says.

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According to Dr Keith Hampson, secretary of the Conservative Parliamentary education committee, the Government will lose at least £8m as a result of its fees policy in 1977-78.

This figure has to be set against the Government's savings of £28m from the new fee levels, Dr Hampson says. "Not only is the fee policy extremely damaging, but it is also costing a lot of money."

He estimates that there will be a loss of some £4m at postgraduate level because of the reduction in self-financing students. At undergraduate level, he says, the Government has failed to take into account the number of students eligible for grants who had not budgeted to claim the £50 minimum, but now would, and their fees would also be paid. This might cost £2m.

There were also some 20,000 undergraduates at the minimum grant whose fees the Government now had to pay, which might cost another £2,500,000.

If the new system was going to cost so much more than the present system, the Government should consider abolishing fees for all home students, he says.

Court decision helps students Easter benefit claims

by Alan Wood
Parliamentary Staff

Students' claims in supplementary-law benefit in the Easter vacation were being dealt with strictly in the order in which they were received and by reference to the law as declared by the Court of Appeal in the case of Atkinson v British Supplementary Benefit Appeal Tribunal, Mr Stanley Dunn, Minister for Social Security, said in a Commons written reply.

He was being questioned by Mr Michael Sheehy (C, Hillingdon, Herts), about what arrangements would be made to deal with special cases from students for special security benefits arising from the Easter vacation. He also wanted details of their entitlement to benefit.

Mr Dunn said that entitlement would depend on each claimant's circumstances and would be calculated under the normal rules. However, the effect of the Atkinson

judgment was that students who allowed a £4 a week to be deducted from their student grant and could demonstrate that the contribution was assessed under the Social Security (Supplementary Provisions) Bill 1976, relating to students might be eligible for special security benefits.

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Adult literacy work 'should pass to FE service'

Mr Bill Dorey, director of the Adult Literacy Resource Agency, believes the agency should be dissolved within the next three years of operation comes to an end next March.

He advocates that the agency should spend its final year of life, which will begin at the end of this month, developing the field of adult literacy work in a particular field, rather than the responsibility of handling adult literacy work in the further education sector.

Writing in the latest edition of the agency's newsletter, Mr Dorey says: "Any organization which is established to do a particular activity in a particular field, cannot avoid the responsibility of considering what can be done to continue that activity when it comes to an end."

"Our aim in 1977-78 is to develop the agency's training programme so that by March 31, 1978, there will be, in each authority's area, a substantial cadre of informed practitioners sufficiently trained to

make a sizable, conscious contribution to the teaching of literacy in the further education sector."

In the ten years since the agency was established, more than 100,000 adults have come forward with reading and writing difficulties.

Three new books, published by the Adult Literacy Resource Agency, have recently been published. The first is a book on the theory and practice of adult literacy work. The second is a book on the theory and practice of adult literacy work. The third is a book on the theory and practice of adult literacy work.

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The eleventh is a book on the theory and practice of adult literacy work.

The twelfth is a book on the theory and practice of adult literacy work.

The thirteenth is a book on the theory and practice of adult literacy work.

The fourteenth is a book on the theory and practice of adult literacy work.

Computer can rove to service 'slaves'

A new type of cheap and versatile computer has been developed at the City University, London, which could have important applications in research, medicine and industry, its inventor claims.

It is the Roving Slave Processor (RSP), designed by Dr John Brignell, working with his team at the Department of Electrical and Electronic Engineering.

The machine is a small portable computer without costly conventional peripherals. It is charged with its programme by being plugged into a big master computer which does the expensive preparatory work.

The programmed RSP can then be detached from its master and used to carry out complex on-line measurements. In this way one master can service several slaves at remote sites.

Dr Brignell says his group is the only one in the world working on the technique, as far as he knows. The research has so far been financed entirely by the university, but it is now attracting commercial interest and Dr Brignell hopes external support will soon be forthcoming.

The possible use of the RSP in electroencephalography (measurement of brain activity) is being studied in conjunction with St Bartholomew's Hospital. For example epileptics have a characteristic wave form that precedes an epileptic fit; its shape varies between individuals but the RSP technique could create a tailor-made instrument for an individual patient to give warning of an impending attack.

The prototype RSP is quite large and mounted on a trolley, but a camera-sized version will soon be completed, and Dr Brignell's long-term aim is to make the machine small and light enough for patients to carry round as they undergo continuous monitoring. The main problem of miniaturization is to develop a suitable power source.

Dr Brignell also foresees important applications of the RSP in the testing of instrument designs.

Dr Key said: "This list was drawn up by a senior member of the administration for me about three years ago. At that time I was a fairly new vice-chancellor and I was considering a series of lunch-time meetings which would help me to get to know lecturers whom I did not meet in the normal course of committee work."

"I wanted to get to know people who were non-establishment, bright, unconventional and wise in their academics. Being on the list has not been a bar to promotion. I can think of two people who have since become readers. In retrospect, I think the choice of categories was perhaps inadequate."

It is not clear that everyone on the list is left wing. At least one person mentioned is believed to have strong right-wing views.

Students showed photo-copies of the list to lecturers whose names appear on it. Dr Key said he feared that if it were widely circulated it might affect lecturers' prospects in other universities.

'Concorde mentality' warning in educational technology

Fears that many governments would develop a 'Concorde mentality' as far as educational technology was concerned and go for big outfits which did not pay, were expressed last week by Professor Lewis Elton of the Institute of Educational Technology, Surrey University.

"In particular I am horrified by the fact that developing countries are now investing in communication satellites for educational purposes" he said.

Professor Elton was speaking at an educational technology today and tomorrow at ETIC 77, the annual conference of the Association for Programmed Learning in Educational Technology (APLET).

He added that he regarded this as an enormous waste of money which in the case of developing countries also represented an under-utilization of their man resources — namely people. It was much better to follow the example of the Russians and now the Chinese of training people who knew a little more than the rest and then use this as a basis for the next step.

He had identified three different teaching methods which had developed considerably since 1945. These were broadly, mass instruction, individualized learning and group learning. The latter he saw as a realization that interdependence and human contact were very important aspects of the process of learning, shown by the Open University's increasing move towards this method.

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AUT urges inquiry into dons blacklist

The Association of University Teachers has called for a full inquiry into a list of "unestablishment" lecturers found during a recent student occupation at Exeter University.

Students found the list when they raided the offices of Dr Harry Kay, the vice-chancellor. There are 30 names on it, divided into three categories: "politically left and generally anti-establishment"; "bright personalities with no particular affiliation; not really establishment types; occasionally a bit aggressive"; and "awkward".

Mr Laurie Sipper, general secretary of the Association, said: "We are extremely concerned. We object to the preparation of this list by a member of the university administration for whatever purpose. The co-opting of staff by political alliances is anathema to us."

"We want a further investigation. At the very least we shall want an assurance that none of these comments go down on people's personal files. Staff at Exeter are very angry about this."

Dr Key said: "This list was drawn up by a senior member of the administration for me about three years ago. At that time I was a fairly new vice-chancellor and I was considering a series of lunch-time meetings which would help me to get to know lecturers whom I did not meet in the normal course of committee work."

"I wanted to get to know people who were non-establishment, bright, unconventional and wise in their academics. Being on the list has not been a bar to promotion. I can think of two people who have since become readers. In retrospect, I think the choice of categories was perhaps inadequate."

It is not clear that everyone on the list is left wing. At least one person mentioned is believed to have strong right-wing views.

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On the other hand

That's not funny

I made use of my rare television appearances last week on a BBC 2 programme called *It's No Joke*, a film of the international conference of humour and laughter held in Uxbridge last summer at which scientists analyzed why everything is such a scream.

There were quite a few celebrities on the programme. Gwyn Thomas was in the studio with Barry Took to comment on excerpts from the seminars. He said: "It is important to study humour because very shortly modest will be more or less normal following the disappearance of religious belief."

Dr Anthony Balfour, a psychologist with a sense of humour, was there too. He said: "There is no one spring of humour. It is anything which produces incongruity."

Ken Dodd was also on the programme. He said: "The sense of humour can be one of the most beneficial mind tools we possess."

One excerpt showed Dr Harold Greenwald of Sonoma State of life that "if you're stuck with a lemon you might as well make lemonade" — which seems about right.

Then Tony Chapman and Hugh Foss, the conference organizers, said the importance of the event was that it put humour in the textbooks.

I did not actually say anything, but was recorded on celluloid in row three slumped across a spiral notebook, doodling, with mouth half open and mind clearly idling in neutral.

In fact he was becomingly meek and chattered everyone. Practice as being in the wrong made him quite at home with the sort of scorching questions which would send most people scurrying to their libel lawyers.

"I am not going to say I love all good or all bad," he said. "My mistakes were bad, I was very unwise in staying long after I should have gone home. I feel some of the things I did were right, like trying to stop the cover up. But I also told the truth in part, because I could see the deception wasn't going to work. I could see I had been selected by Shrielehan to take the heat. He figured it was his or me."

Afterwards he said it was refreshing to discuss Watergate with university people because, unlike the media, they were not primarily concerned with the amount of money he was making out of past mistakes.

His introduction laments the fact that not everyone shares his passion for puzzles. "Some time ago, on a beach in Florida, I was using a conch shell to catch a puzzle in the sand for a friend. It was a complicated puzzle, and I had covered considerable wind-swept acreage with diagrams, charts, and computations when I ceased to look up — just in time to see my friend pile the last of his beach gear into the car and drive off."

The world of James F. Flax is full of people emptying water vats with different sized buckets and travelling in opposite directions at different speeds to see when and where they will pass. A question which Flax, a leading American puzzler, finds uncommonly interesting is the following: "A census taker, stuck in a house, how many people live in the house and what their ages are. The women (typically) tells him that her three daughters live in the house, that the product of their ages is 36 and that the sum of their ages is the number of the house next door."

The census taker (overcoming an urge to strangle her) goes next door and looks at the number of the house. When he returns he says he has insufficient information whereupon the woman tells him: "My oldest daughter is sleeping upstairs." The census taker promptly figures out the daughters' ages. What are they and how does he know?"

I worked away at this doggedly until my head hurt and the room felt extremely warm. If, like myself, you need the solution, see the bottom of the page.

While you are reading that I am

going to check that James F. Flax has not booked into the Sea Breeze guest house, Teignmouth.

Was there a second Watergate at the NUS conference in Blackpool last week? A punning Daily Express reporter heard of a break-in in president-elect Sue Shipman's office last week. She had a scoop, though he had a scoop. Sadly, only keittes were reported missing.

Curious how people use the adjective "blind" to absolve themselves from responsibility for their actions. We have blind copied to cover our omens improve, blind drunk to explain our motoring offences, and now Blind Ambition as the title of an autobiographical book designed to account for the behaviour of John W. Dean III whose Watergate activities would, in a culture less tolerant of corruption than our own, have seen him strapped to a pillnsey butt and left to float out to sea.

It has been on a helicopter tour of Britain expiating his sins by chat show, seminar and international best seller (published by Simon and Schuster). For only £4.95 we can now gain insight into the mind of one of the wisest of the greatest United States masters of our time.

At Keela he stepped out of the helicopter not in sackcloth and ashes, but in the neat attire of suit which was his trademark in earlier and less ideal days. He was to address a seminar of 50 academics who could barely wait to see if he would use all that Lenny Bruce-type vocabulary which made the Oval Room roar during a Nixon era.

For some reason the author omits to say that the author generally stuck up with glue, but sometimes are pinned.

The circus poster refers to a single event in the future; the performance will take place on a specific day(s) in a particular place. The poster necessarily gives explicit information of a spatial nature, as well as indicating the date or precise period after which the poster no longer applies. From another point of view, it is the first hypothetical proposition of an economic contractual exchange system.



The bear: a semiotic approach

that for every insight you can mine out of the jargon, 100 banalities cluster round it. For instance, the chapter on "The Semiotics of the circus poster" deserves some sort of prize.

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Never mind racialism, what about the cuts?

The student movement looks much the same after last week's national conference as it did after the previous one. Despite a slight increase in the Conservative vote, and a change of name by one of the ultra-left groups, the state of the parties is much as ever.

The Broad Left, the ruling group of Labour and Communist Party supporters, has had its grip on the executive weakened by the elections, but some members claim this was because it failed to get its voters out of bed—an unusual lapse for a group which is renowned for its well-oiled party machine.

In the new executive the Broad Left will retain all eight top posts, but the Federation of Conservative Students will have two instead of one and the ultra-left three instead of two (two members of the Socialist Students Alliance and one International Socialist).

The Conservatives, now the largest single opposition group, mustered 150 delegates compared with about 100 each for the two far left groups. In the last resort, however, the ultra-left's combined vote went to the Broad Left rather than the Conservatives, ensuring the election of Miss Penny Cooper as treasurer, for instance.

As the agenda for the Blackpool conference might well have fallen within the terms of the old, un-reformed constitution. There were only two motions that could have been thought of or all doubtful. One was on racialism, the other (taken as an emergency motion) was on Northern Ireland.

In the first, argument centred almost entirely on the stance that students should adopt towards bodies of racialist organizations being invited to speak in colleges and universities. And although the motion resembled in the manner familiar to NUS cognoscaires—consecutive clauses under "conferences notes" mentioned the Agee Memorandum in order of the discriminatory charges in college halls—there was no mention of the situation in Southern Africa.

Again, when Northern Ireland was debated, Ms Slieman repeated the point that she had made at the presidential hustings—that the NUS's priority must be to do everything in its power to defend members against bombing attacks.

Everything else came a bad second. As since members of the Ulster delegation thought that the immediate withdrawal of British troops would not ease the problems, the conference voted against an amendment calling for withdrawal.



Ms Sue Slieman, the incoming NUS president, and a view of the conference

After the collapse of its service companies, the NUS cannot afford to take on any more commitments. In private session, Mr Chris Morgan, the treasurer, warned that expenditure would be severely curtailed for at least the next three years.

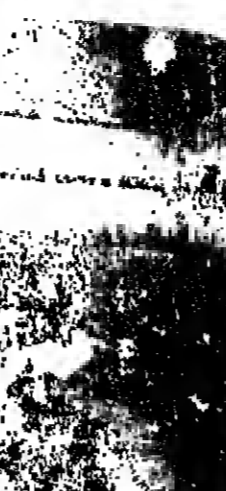
But, politically, the problem is still more serious. There is a limit to the degree to which NUS members can be persuaded to give their banks, take up their sleeping bags and occupy administration blocks. It is not just that most students have other things they want to do. It is also that the chances of actually achieving anything are, in the short-term, remote.



The result might be some change in targetment policy—but student leaders cannot easily claim the credit.

This problem has two results, both clearly illustrated by the debates at Blackpool. First, the Broad Left is reluctant to back widespread negotiations because the only group that can benefit is the broad-based left. The impossibility of winning negotiated concessions develops the role of the established leadership. Hence, in the debate on fee increases, the conference agreed that the emphasis should be on petitioning and lobbying through national political channels rather than on a nationwide campaign on occupations. Though the executive was censured for its lack of action on the fees issue, this was more a gesture of frustration than a call for a radical change of policy.

Second, the Broad Left is trying to pick out the areas where occupying students can win concessions at a local level. This is persuading governing bodies to withdraw increases for some self-financing students. Another is getting university and college authorities to make some declaration of public support for the students' campaign. Again, the conference lacked the executive line.



Ms Sue Slieman, the incoming NUS president, and a view of the conference

But there is one area, at least, where students can hope to win genuine advances, rather than simply clinging on to what they already have.

This is in the further education sector, which the Government is committed to housing. And at Blackpool, for the first time in many

Learning by rote in a land where 'party is not state'

WARSAW
In his plush, oak-panelled office on the 24th floor of Warsaw's elegant Palace of Culture which warts every other building in the city, Professor Jan Szczepanski loudly condemns mass higher education. It can only lead to a full in "the world", he says. Only in the socialist countries is the Humboldt ideal of universities as centres of excellence still alive.

The influential guru of Eastern Europe's sociologists, Professor Szczepanski is director of the Polish Academy of Sciences' Institute of Philosophy and Sociology. Along with such well-known names in the west as Lord Ashby, Torstein Husen, Henri Janne, Clark Kerr and Max Kolsstam, he is a member of the Board of Trustees of the International Council for Educational Development of New York, whose chairman is Dr James Perkins ("I'm one of Jim Perkins's membership among the mafia", as Professor Szczepanski puts it).

Today, on the eve of his departure, he is much in demand by the government to head committees. Currently, he is chairing an investigation into the problems of the handicapped; he is overseeing a massive survey of resumption of their welfare as a result of their three times larger area.

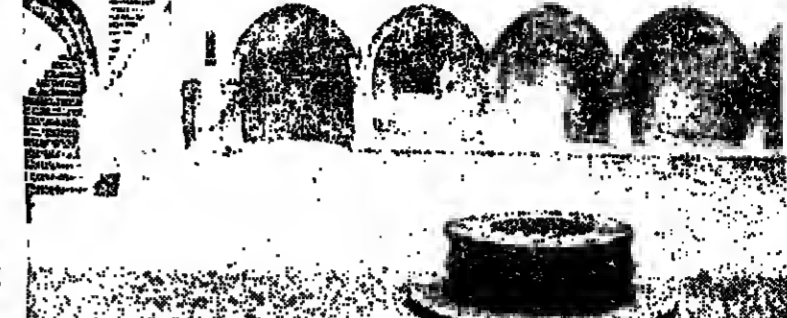
At the moment, however, he is in the thick of the wake of the food price riots in the Balde sea-beach cities of Gdansk and Szczecin in December. From fees he has constantly held out the prospect of higher living standards. But after last June's events in Poland and USSR, and the certainty it brings to another attempt to raise the standard of living, he is beginning to look a little more pessimistic. Sugar is rationed, but almost permanently "off" in the shops and shops in the urban higher education have been closed. (One Wednesday has been closed.) The government has been reduced to the level of a butcher's. (One Wednesday has been closed.)

to be graduates and the universities have taken over responsibility for training. Teachers without degrees are having to do rigorous correspondence courses to upgrade their qualifications.

All this will have a profound effect on higher education when the first "graduates" of the 10-year school emerge in 1988. For at the age of 17 a two-year "hot-house" school is planned for those thought most capable to do full-time university study. Intense specialization will be the keynote. Professor Szczepanski will have little need to worry about the illusion of Humboldt.

Students now follow formal lectures six days a week. Learning by rote is still largely the order of the day. The lack of textbooks, especially in modern languages, puts an extra burden on them. So does the fact that first degree courses have recently been cut from five to four years while curricula have remained basically the same.

Consequently, despite the stiff entrance examinations and tough competition for places (in some subjects there can be as many as 10 applicants for each vacancy), the direct entry remains very high. Under the new system it is hoped that entrants will be better prepared for more conceptual work at undergraduate level. One of the aims is to involve students in research teams as soon as possible after they arrive at university. More free time for private study will also be introduced.



Cracow University.

Students can qualify for free housing or be lent money to virtual free terms to build their own houses: an impossibility in a town. Doctors fare even better: not only may they be offered a basic salary while they wait to qualify for free housing with a guaranteed minimum of three rooms and a kitchen. One scheme being developed by the Institute is to create centres of excellence in different fields at present universities. At present, the brightest students are sent to Warsaw University, its technical university and various specialized justiologian University of Cracow.

Although all the country's institutions of higher education are theoretically equal, it is certain that any attempts to live off prestigious departments through a central dikta would be fiercely resisted.

Bringing the best undergraduate early into team research is another feat. The idea is that the research problems are linked to the research problems and that many of the researchers should come from industry itself into the universities for the work. In that way, students would be brought far more quickly into contact with the world of work. They would also be encouraged to develop affinities with the company they are helping and hence join it on graduation.

The institutes are largely autonomous but under the leadership of the Ministry of Education. The institutes are largely autonomous but under the leadership of the Ministry of Education. The institutes are largely autonomous but under the leadership of the Ministry of Education.

Some links do exist. The Adam Mickiewicz University in Poznan has been linked with Oxford and Reading since 1969. Sussex and the Central School of Planning and Statistics in Warsaw have held seminars. Strathclyde and Lodz Technical University have a strong exchange programme. There are also tentative plans for an agreement between the LSE and Warsaw's Planning School.

But the Poles, who frankly admit the gap to Western technology and know-how is one of the main attractions of closer links with non-socialist countries, are anxious for more informal contacts. The mood of academics towards the government is hard to assess. Most of the dissidents come from academic backgrounds, but their numbers are very small. Mr Jerzy Kuberak, the Minister of Education, dismissed them as "professional protesters" and emphasized that government policy was to ignore them.

From bisexual consciousness to the oil cover-up—sociology has a place for it

A subject without a centre was how Dr Frank Parkin, of Oxford University, described sociology last week. The remark applied to the British Sociological Association at which he was speaking.

The sociologists assembled at Sheffield University heard a eclectic variety of papers. Although the theme of the conference was "power and the state", contributions ranged from a discussion of bisexual consciousness and obligations that the Social Science Research Council was in cahoots with the big oil companies to the exciting results of a nationwide survey of social mobility.

During a discussion of how the SSRC allocated its money for research, Dr Parkin described sociology as "a subject without a centre". He was doing so, they say, in a country, berated the sociology establishment for ignoring and suppressing work involving surveys. Rowntree, the utopian-socialist sociologists had turned their noses up at the work in the field, with interviews and questionnaires, he said.

The judgment was given weight by others. Mr Martin Bulmer, of the London School of Economics, looked at work published in the last 15 years and concluded as follows: "It is striking how relatively few monographs reporting the results of research have been published, and how many textbooks, reviews of the field, or programmatic statements about the future development of sociology."

The survey researchers and those who argued for greater attention in sociology degrees to the methods of social research considered their case supported by the admission of the chairman of the SSRC's sociology committee, Professor Raymond Hilsley, of Aberdeen University, that he personally knew little about survey research.

But what to some sociologists is numerical methods and the use of computers is to others a positivist counter-attack. Professor Philip Abrams, of Durham University, though he did not use that phrase, complained of the SSRC trying to research what he called "library" sociology from books. In addition, two-thirds of the SSRC's grant money was given to research on economic management, from the management's point of view—or, as one participant put it, the SSRC was an arm of state bureaucracy.

research money surfaced again at the conference. Still smarting from what he said was years of being smothered by the SSRC, Professor Robert Moore, of Aberdeen, hinted that there were sinister reasons behind the council's failure to support his research on the impact of North Sea oil in Scotland. It was perhaps too politically sensitive to study the oil companies, yet these would have to be a central part of any worthwhile research.

Sociologists, the conference was told, were unwilling to be the cats-paw of governments, even if civil servants were bearing gifts. A paper by Dr T. A. Acton, of Thames Polytechnic, and Mr Robert Rappaport, formerly at Kent University, related the history of a project they had undertaken on behalf of the Department of the Environment during which they had been and their social science colleagues who were to do policy-related work.

They found sociology, both in universities and polytechnics, to be more willing than economists, to employ a "policy" work. The message was that their subject was to be town planners and the like to construct a government work. The message was that their subject was to be town planners and the like to construct a government work. The message was that their subject was to be town planners and the like to construct a government work.

analysing social contradictions in terms of the highest ideals and the reality of their impossibility. Anything practical seems to get lived off to a new range of social technologies, from social administration to social psychology. It is precisely because we are the acknowledged priests of the ideal that government want our priestly blessing—our critical validation of their policies."

Dr Parkin said sociology had no centre, and it was true that at a conference there was little beyond Dr Acton's and Mr Rappaport's deep involvement with questions of practical policy and the very theoretical accounts of Marx and his modern epigones, Althusser, Poulantzas, and Gramsci. Some papers were in the traditional mould of British sociology in their concern with race relations and social structure.

One of the most interesting of these reported the first results of a large scale investigation of social mobility financed by the SSRC. Geoff Payne, of Abercrombie University, said Britain was a much more open society than many people thought, and the sons of professors and managers by no means automatically succeeded where their fathers had. The members of the working class with or without formal educational qualifications stood a fair chance of reaching professional jobs.

A paper by Mr Payne and Mr Graeme Ford, based on the Scottish mobility study, corroborated by a parallel work done at Nuffield College, Oxford, said there was no such thing as a managerial elite in the technical world. The dynamic privileges enjoyed by what they called "the elite"—owners of capital, viceregal chancellors, top civil servants, generals, and charmen of the board—were another matter.

Our phrase purports to describe the present state of the field, was much banded by a thousand lower echelons of education closer to the Church than Moscow and Manila. Mr Gomulka? Under the latter there was no government meat on Monday and no Churchill meat on Fridays.

Professor Szczepanski took as his theme to find out what people actually want, rather than what the planners think they ought to want. He throws out un-Marxist remarks like "the real revolutionary force is the housewife" and "the trouble with socialist bureaucrats is that they are as arrogant as Western managers".

He emphasizes that socialist consumerism should be based on "reasonable" needs and embrace material as well as spiritual. People should be taught to buy and education should develop "consumer consciousness". All of which is a far cry from the instant queues which form as soon as the word spreads that some goodie has hit the shops.

Perhaps Professor Szczepanski's most important government work, however, has been as chairman of a non-party committee of experts on the state of education. In 1974 he almost immediately after he took power, published his findings. Called for universal 10 years compulsory schooling to be introduced in 1990s as part of an overall state-to-grave system of permanent education.

Great demand exists for their services as private tutors in cities and towns. With a low birthrate and a still expanding economy, people with a skill can automatically find work. So they often invest their savings on home lessons and evening classes to improve their qualifications.

To try and attract graduates to the countryside an elaborate system of incentives has been devised. Students who agree to work for provincial-based companies to work with them for at least three years on graduation.

In return, the students get special scholarships, free textbooks and most important of all, in a country where the lack of housing remains the biggest social deficiency, guaranteed accommodation within a year of starting work.

Teachers prepared to work in villages can qualify for free housing or be lent money to virtual free terms to build their own houses: an impossibility in a town. Doctors fare even better: not only may they be offered a basic salary while they wait to qualify for free housing with a guaranteed minimum of three rooms and a kitchen. One scheme being developed by the Institute is to create centres of excellence in different fields at present universities.

At the Ministry of Employment senior officials confirm the difficulties. They point to the astonishing statistic that almost one in eight of employed people in Warsaw have some higher education qualification. In provincial towns, the figure is one in 32.

Students usually have to study at the university nearest to their homes. On graduation they have a right to employment in that area. Most students are obviously concentrated in the urban higher education institutions and so relatively few graduates are obliged to work in the rural areas.

The spectacular lack of trained personnel volunteering to work in the countryside is partly because there is, quite literally, nothing to do since the private peasant farmer and his way of life dominates. But equally important there is little scope for a second job. Most graduates, even quite senior university academics moonlight to make ends meet. It is part and parcel of Polish life at all levels.

Such a policy has been rejected in Poland. "You cannot make a worker of a pig" is the attitude of the government towards underemployment. What, for example, do you do when a graduate of a Warsaw agricultural college insists on the right to practice his or her profession in the capital, as many do? There is much "job invention".

Rural incentives

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East-West go-between

Each institute is headed by a director, who is a professor elected by the staff in secret ballot for three years. The institutes themselves are grouped into faculties, each of which is a council and a dean who acts as a link between the faculties and the central university administration.

This system, with its in-built checks and balances on individual empire building, makes, according to Professor Zygmunt Rybicki, rector of Warsaw University, for simplified and more efficient decision-making.

Some links do exist. The Adam Mickiewicz University in Poznan has been linked with Oxford and Reading since 1969. Sussex and the Central School of Planning and Statistics in Warsaw have held seminars. Strathclyde and Lodz Technical University have a strong exchange programme. There are also tentative plans for an agreement between the LSE and Warsaw's Planning School.

Most academics seem indifferent rather than dissident. When dissidents do appear, indeed, Poles of all kinds—a apprehension about the motives of the Soviet Union, Nationalism and the memory of the Partitions are constant factors in Polish life. The return of any foreign power is the thing Poles dread most.

This fasting appears to extend to the higher echelons of the party. One academic even advanced the theory that the Church was treated so well (Mr Giersek sends Cardinal Wyszynski flowers on his birthday) because its strength makes it easier for the party to resist Soviet demands for more influence.

Another academic—a fierce opponent of socialism—denounced dissidents for producing underground material and organizing themselves secretly. "That is the way they do it in the Soviet Union", he said. But Poles should not be threatened by the return of any foreign power is the thing Poles dread most.

Perhaps the most remarkable manifestation of the Church's influence in Lublin. It flourishes, its graduates are treated the same as any other and it is entirely run and financed by the Church. It is the only private university in Poland—and in the whole Soviet bloc—unless, of course, one counts the Party's Higher Schools of Political Science. As the Poles never tire of saying, Party and State are two separate things.

The balmy days are over, but eduspeak still rules OK

Nicholas Bagnall looks back on 20 years as an education correspondent

I am not sure how people become education correspondents these days, but 20 years ago it was very simple. A single leader page article in a national newspaper was enough to give one the standing of an expert, there being no much else in the field.

My own passport to authority was a closely-researched little piece headed "Anomalies in London School Plans", followed soon afterwards by another called "Why the Eleven-Plus Should Stay", in no time at all I was interviewing Mr Harry Rée on television.

I was to say to him: "Would you say the 11-plus was crucial, Mr Rée?" and he was to furrow his brow for a second and reply: "No, I don't think it is crucial," and that was more or less how it went out. Both of us have changed since then.

Things were not all plain sailing in those days, though. For my London School Plan piece I rang up various head teachers to get a sharp call a few days later from the LCC press officer. If I was caught talking to any more LCC employees, I was told, he would report me to my editor.

However, it was not until the end of 1955 that I became a full-time education correspondent, by which time there was a lot of competition, and more "spokesmen" for this and that. The aim (with a few exceptions) was to bypass the spokesmen and talk to the policymakers as it is today; but this was sometimes difficult—there did not seem to be a policy.

A staunch contact was Sir John Newsom, then on the move from the Plowden Committee to the Pub-

lic Schools Commission. At first I had him in my office, until I had moved to the National Union of Teachers, whose journal I had been editing in shirt while earlier, had done a survey among its members about the right age of transfer to secondary school, and I duly discussed its results.

Meanwhile, Lady Plowden was convinced that the information came from her own committee, which had also been sounding teachers—and this man had spilled the beans. She gave him a dressing-down, which I have balanced me. What a mix-up.

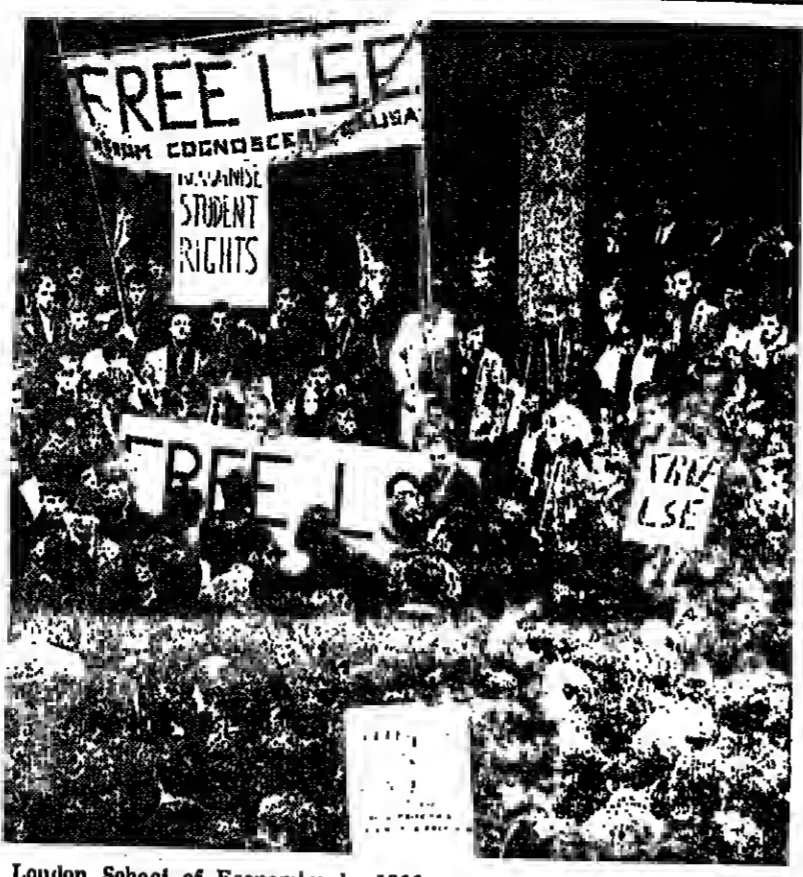
But he was a wonderfully elegant man with a leak. At dinner with myself and two other trustees he started talking about the All Souls' Group, which I knew all about as I had been to its meetings. It was a bit surprised when he handed each of us a little folded card with the names of the Group's officers and so forth.

Much later I came across this card and a tiny slip of paper fell out which I had not noticed before. It carried (too late) a warning. I do not know whether the other two had the same.

Anyway, good times were soon to come for the education correspondent. Student choice of subjects was upon us. One tends to forget how many white passions these events aroused, not only among radical students, some of whom had readied read Engels and the early Marx, but also among newspaper editors.

For me, student feelings were typified by an incident on the night those gates came down at London School of Economics. Clive Morke and Houghton Street were in some chaos, with police and students struggling while Black Maria stood by a young lecturer called Robin Blackburn with an in-built plunger for restraint, and other lecturers less sympathetic to the student cause stood in the doors taking names.

A very polite, very furious girl came up to me as I was discussing



London School of Economics in 1966: passion among both students and newspaper editors.

these happenings and demanded: "Are you a professor?" I felt like Clive the poet, and I felt like the milk in mistake for a conspiracy. "No," I said. "Well, if you had been, you ought to have been ashamed of yourself," she stated, thus, with a fine use of the remote conditional, having the last word.

But what the legends say I the other day a colleague of mine (not an education correspondent) was recalling the night when "students tore down the gates of the London School of Economics". Well, it was not quite like that. A few rather flimsy internal barriers had been in fact removed with the help of a medium-sized screwdriver.

No doubt the newspaper cuttings had misled my colleague. Ed-mercy covered at a spot of violence: they were genuinely shocked by the sight of undergraduates questioning what their teachers taught them. It was not

their idea of a community of scholars, whatever might be meant by that term.

It seems slightly comic now, but it was serious enough then. After the student unrest, and then the student unrest, came the Great Teacher Training Scandal, which I suppose has had the largest run of them all. Readers of *The Times* hardly need reminding of the details.

What seemed to me mild at the time was that Lord James was able to give a pretty good idea of what his committee was going to say as early as February, 1971, though it did not report till the end of that year, and that in May of the same year a number of us who contrived to look on teacher training edited by Bruce Kenble could predict its outlines with fair accuracy.

That Christmas, the James report still unpublished, I annoyed Mrs Thatcher by writing that the Government were going to accept the main points of the report, par-



Mr Mike Salmon

Ideas outlined below are therefore only put forward to illustrate a small part of the possible range of opportunities with which we may be presented:

- bearing in mind the large numbers of overseas students on existing courses in Britain, building in offer "relevant" options;
- providing special training courses for engineers, etc. those with experience from developing countries who themselves engaged in education by helping them to design their own teaching materials, knowledge and give them more confidence to design relevant courses on returning to their country;
- promoting research into the needs of developing countries, possibly involving overseas students on projects/dissertation demands of courses to these research interests of staff;
- establishing a more effective dialogue between the cultural and industrial representatives of developing countries in Britain and the United Kingdom; higher education institutions to discover, precisely what types and levels of skills are required;
- establishing centres for special

clearly the education area training programme reminds me how many of State could offer a similar style.

When in 1966 I wrote inaccurate story about the land (the point being that in getting someone in Public Schools Commission enough in 1966, I was were widely wrong. I was to call me a liar, and a lot of large numbers of students' guest in Christmas party, for later.

Mrs T's technique, James' affair, was to use me in a party a couple of years ago, taking me to an art and cinema in a date. "I don't remember," I said, "I don't think you've done it."

The most dramatic happened in education in 1970 or 1971 years ago at the formation of the for the collapse of the training system. It is the more or less subtle that everything has been going wrong.

The change is hard to remember those days, like immorality in the with Eric James (in 1969) or so as they covered the view to Heslin in the 1950s of the things, hardly planned it was—another day.

People sometimes find a good time to get education reporting that everything seems to go to a shabby hall, but the Academic Life, the funders give less to the untroubled people has fresh things to do.

One thing I do not do is the checkbox of the subjects with their knowledge. The other reading, from the apparently respected that teachers and skilled professionally as a way of changing appropriate (pupils) bring. The best to write like the "should the rest?"

The author and education correspondent Sunday Telegraph, and of *Learning* editor.

A new type of game demands new types of rules

Daphne Jackson discusses how curriculum changes raise problems of professional recognition

The employment pattern of scientists has changed significantly in the past 10 years, with a marked increase in the number of new graduates entering posts in commerce, including accountancy, banking and insurance. Even among those entering industry there is an increased tendency to go directly into management, in contrast to later entry into management preceded by a period in research and development.

The employment trend for physicists, shown in Figure 1, reflects the fluctuations in industrial activity although the recruitment of science graduates is less specific to particular industries than the recruitment of engineers and technologists.

Over the same period, major changes have occurred in higher education. New institutions have been created, others have changed their status or have been reorganised. There are now well over 60 departments in universities and polytechnics offering degree courses with physics as a main subject.

Under the influence of criticism from industry in the 1950s of the "brain drain" of the later "swing away from science", attempts were made to create new degree courses which seemed in various ways to be more appropriate to the times. Many of these courses offer students a wider choice of subjects than is available in a conventional honours degree course, with the consequence that less time is devoted to the principal subject.

The trend in physics is illustrated in Figure 2, which compares the number of graduates from single honours degree courses with other such courses and the proportion of those who take physics as a second subject.

At first degree level there are several different types of course. Single honours courses involve a concentrated study of physics plus supporting mathematics and, in some cases, a very small component of complementary studies. Combined honours courses usually involve joint honours courses with one or other disciplines.

Combined study of physics with a closely related subject such as mathematics, chemistry or electronics is not new and does not present a problem but there are now many combinations with more disparate subjects such as economics, music, or a modern language.

Modular, interdisciplinary or course-unit systems involve the completion of a specified number of modules or course units at various levels. The choice of subject may be limited to a range of mathematical and science subjects or may extend over a wide range of subjects in many disciplines.

General or general honours courses which involve the study of three or four related subjects are now less common. Pass or ordinary degrees are sometimes awarded on the honours course completed at least satisfactory level or on a similar but less demanding course or on an entirely different course. Not all departments award both honours and pass degrees.

Academic opinion is quite sharply divided on the merits of various types of course. There is a feeling that the interdisciplinary courses do not provide a coherent or sufficiently deep study of any subject and do not lead to intellectual development, although very considerable effort goes into the planning of such courses and in conveying their enthusiasm to the students.

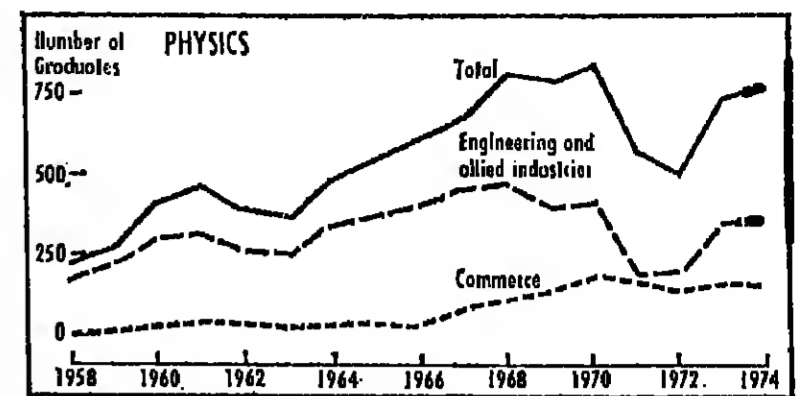


Figure 1. First employment in industry and commerce of new graduates holding first and higher degrees in physics (From "Economic Trends", No. 263, March 1976)

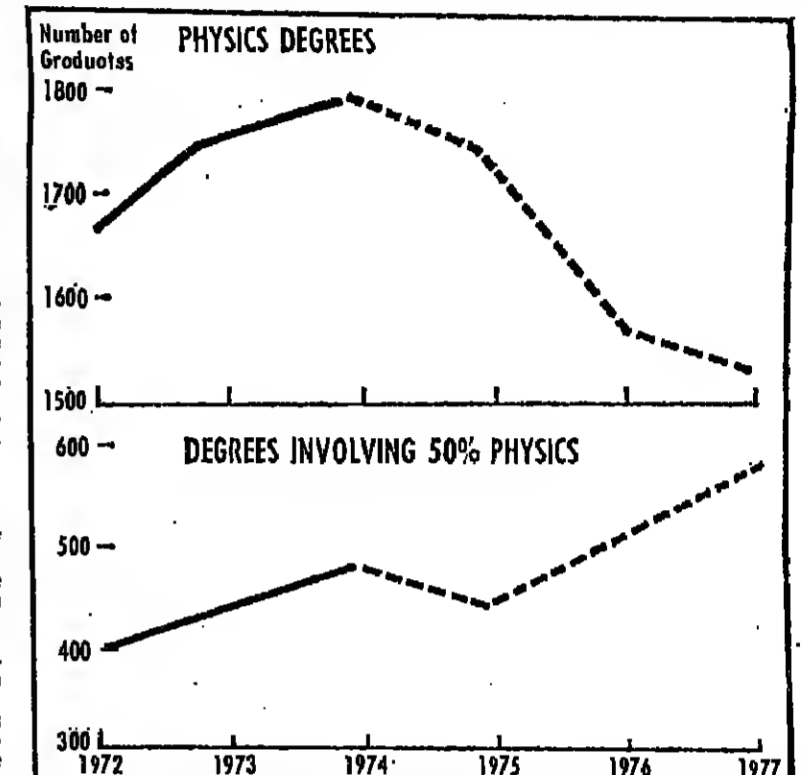


Figure 2 Actual and forecast maximum numbers of graduates from single honours degree courses and from other degree courses involving 50 per cent or more of physics. (Results of 60 replies from universities and polytechnics to a questionnaire in January 1975)

With these guidelines it was agreed that the minimum requirement for corporate membership should be an honours degree with not less than 50 per cent of physics supported by several years of appropriate professional experience. The Institute of Mathematics and its related subjects should be recognized as part of the "physics" content of any degree course whose aspects of mathematics which the department offering the degree considered to be an essential part of a training in physics.

The normal route to corporate membership is an honours degree with not less than 65 per cent of physics and three years' experience. Pass or ordinary degrees with 50 per cent or more of physics lead to the non-corporate associate membership. Experienced physicists who lack the requisite knowledge of physics, but who have made an adequate educational background, may be elected on the basis of outstanding contributions.

Candidates who have moved out of physics are considered if they have a previous period of work requiring knowledge of physics. It is not, after all, the practice to remove from membership or fellowship those who become company directors or vice-chancellors.

Through its review of courses, the membership committee of the Institute of Physics has become concerned over a number of fundamental issues such as the future of physics teaching in schools, the plight of physics departments in colleges of education, and the quality of careers guidance, and is exploring the possibility of an alternative route into corporate membership for experienced physicists who lack an adequate educational background.

By no means every qualified scientist sees the need for professional institutions with grades of membership, but it is necessary to establish the significance of professional status and to include this concept in the counselling of sixth-formers and students.

Professor Jackson is head of the department of physics at Surrey University.

New initiatives are needed in education for development

The recent deliberations of the Swann Committee on university work overseas and concern about the impact of higher tuition fees have each focused attention on the relationship between British higher education institutions to the needs and aspirations of the economically less-developed countries.

The Ministry for Overseas Development (ODM) seems to be developing a coherent policy which may underpin future cooperation. However, much of the work developed under British Council and Inter-University Council for Higher Education Overseas (IUC) patronage has been in the spirit of assistance not cooperation, cultural in objective rather than economic and social, based on colonial traditions and reported in a wish to export British cultural, educational and technological activities.

It is therefore not surprising that the developing world is becoming increasingly sceptical of such "assistance" when one hears growing concern in Britain itself of the "irrelevance" of much of higher education to meet its own economic and social needs.

The "relevance" debate is often floundered by an assumed direct relationship between educational investment and economic growth which treats expenditure on formal education primarily as a production output. From this assumption it is easy to argue that the more a course is "job-related" the more its development should be encouraged. However, if relevance is to be meaningful, it needs a wider definition; such a definition may be derived from a view of education development as prerequisite of economic progress.

British nominees should not go abroad to "give aid" and in reach the developing countries how to set up a university or enlarge an existing one, but in a real spirit of cooperation, exchanging views much about the ways existing agencies in tackling its problems and helping to enrich our own educational tradition.

In Britain's terms, the true is opportunity to reassess the contribution we can make in the developing world. The planned rise in the fees paid by overseas students studying in Britain will force a re-evaluation both by overseas governments who sponsor students and by private families who support their children to come to this country.

However, the re-evaluation of the returns gained from studying in Britain is not merely a product of the rise in fees; it also reflects the many countries, initially, they had to "import" what education they could get and that, in a sense, was the surplus output of empty places in the developed world. Today many countries have set up their own institutions which have achieved an international reputation over a limited range of disciplines, allowing them to offer qualifications and to "keep their students at home."

It is, however, difficult for many developing countries to establish their own courses; they need to undertake such as engineering, construction and applied sciences due to the relative high cost of such facilities in universities and colleges, and because the indigenous people already qualified can command much higher rewards working for multi-national companies.

To be against these demands that the existing British contribution might be measured and future plans laid. In general, it might be said that up to now, Britain has accepted large numbers of students to study on courses in our universities and colleges not specifically developed to meet the needs of the overseas students, and that we have accepted too often exported to the developing countries our existing courses and practices, without assisting them in establishing their own institutions.

In Britain today, science and engineering courses are failing to attract students, and it would be all too easy to "export" surplus staff to places on United Kingdom courses to the developing world. Before doing so, however, it would be well to ask why such inherently interesting areas of study are failing in interest with students in a highly technological society.

If the answer lies in the prescriptive nature of the courses offered, there would be every reason for ensuring that the developing world should be shielded from such "assistance". The increase in student fees may well release resources in the social sciences and business administration.

There are constraints against increasing institutional involvement in the economically less-developed world which are difficult to overcome. One is the esoteric interests of some institutions as regards research and publication; the lavish research facilities possessed in the developed world are not the Third World.

There are also a number of constraints operating in the developing world which should not be ignored. Many overseas students, for example, are seeking a British degree or professional qualification for the status which that for its actual knowledge/skill value. This presents a barrier to a range of possible assistance which does not fit the recognized United Kingdom qualifications, but which might otherwise be used to give them more confidence to design relevant courses on returning to their country;

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Whatever happened to the James report?

When the James report first appeared in 1971 it was treated as a document of great significance. The colleges of education, despite their dislike of it, expected it to be some kind of harbinger of their futures, and realized that some of the recommendations it contained might well be used against them by the Government.

The subsequent White Paper, and the recommendations which followed, did not immediately destroy this assumption. It is only now, in such different circumstances, that we can see the huge gap between expectation and reality summed up in the title of the *A Framework for Expansion*.

The James report looks very relevant after a short passage of time, especially if it depended heavily on the increased financial resources. Central to the thinking in the whole of the document is a programme which was based on an increase in teaching staff and an expansion of full-time courses.

It might be thought rather strange to resurrect the James report at a time like this. But it is important to re-examine the report, because much of government thinking in the "Yellow Book", let alone the subsequent decisions, as well as the remarks of ex-members of the James committee, show a curious use of half-remembered notions about the report.

There is a great difference between what the James Report actually said, and the way it is now being remembered and cited. The best example of this is the Diploma in Higher Education. Originally conceived as a shortened version of a degree course which would give students the chance of greater mobility between courses, and indeed, between institutions, it has now become a stepping-off point on the way towards a degree, an excuse to remove a number of the weaker students.

The most significant change between the original document and its subsequent interpretations lies in the "third cycle" or provision of a wide range of activities to extend teachers' personal education and professional competence.

"To none of these recommendations," we read in paragraph 2.1, "do we attach greater importance than for they determine a great deal of the thinking which underlies the report as a whole." The crucial importance of the third cycle, or originally envisaged, was that it concentrated on professional understanding.

"The 'personal education' was undergone from the point of view of the teacher, and the 'professional competence' was envisaged as something more than a few skills. The report went out of its way to

point out that they were not thinking of "in-service training" (it is called a very misleading term) and yet this is what has replaced the original conception.

At a time when administrative convenience makes it compelling to drift towards consecutive courses, it is worth reminding ourselves that the James Report had quite different intentions. We said that "all teachers ought to have opportunities to extend and deepen their knowledge of teaching methods and of educational theory."

By this, the committee do not mean an additional year tacked on to the end of a degree course, or to some other mixture of "modules". They imply that there should be a series of cycles two or three in length, each cycle consisting of teaching, research and the techniques of teaching; they imply that a successful college should be a "professional centre".

The present tendency to look to diversification as an aid in time of trouble has its roots in the James Report, but depends on a crucial misunderstanding of the original intention. Colleges of higher education are beginning to look more like American liberal arts colleges.

The adoption of a wide range of degree courses denies the concern with professional training that is the avowed starting point of the James Committee. The whole report was called into being because

Cedric Cullingford

The author is assistant director of studies at Charles Mason College of Education, Ambleside.



The Times Higher Education Supplement (London) Room 541 National Press Building Washington DC Tel: (202) 638 6766

The director of the National Science Foundation has warned of a bottleneck in academic appointments

Young scientists 'being frozen out'

An entire generation of bright young minds may be lost to scientific disciplines because there are too few teaching posts left in universities, the director of the National Science Foundation warned.

Such a high proportion of young and middle-aged lecturers in science and engineering departments now had tenure that normal conditions for promotion would not open enough positions for young Ph.Ds. Dr Richard Atkinson said: "Yet it is they who must pick up the torch if we are to maintain a strong research capability in our universities."

There had been a steady decline in the proportion of younger Ph.Ds on campus in recent years. In physics, lecturers holding a Ph.D for seven years or less fell from 40 to 10 per cent between 1968 and 1975. At the same time there had been a large increase in the proportion of tenured teachers, reaching an average of 70 per cent in 1974, with physics standing at 78 per cent and chemical engineering at 81 per cent.

All this was exacerbated by the sharp projected fall in student enrolments, reflecting the falling birth-rate and the consequent reduction of the teaching force. Dr Atkinson said the 18-year-olds group in the United States would peak at 4,300,000 in 1979, and after that decline to about 3,500,000—a drop of about 20 per cent in ten years. This would therefore be a drop in undergraduate and graduate student numbers.

The National Science Foundation projected a total of about 210,000 graduate students pursuing advanced degrees in the sciences and engineering in 1985, 15 per cent below the 1970 peak. The worst case was in the physical sciences, where graduate enrolments actually declined at 100 to 1981 and had already declined by 12 per cent by 1973. The 1985 enrolment in this area would be about 55 per cent below the 1968 peak.

The effect of this on teaching staffs would be a 7 per cent decline in science and engineering teachers between 1972 and 1985. The worst case was again in the physical sciences, where a drop of 25 per cent was anticipated. Dr Atkinson said the Foundation was greatly concerned at these trends. A solution could not be forced with Government money or made in Washington.

Top HE post for Professor Trow

Professor Martin Trow has been appointed director of the Centre for Research and Development in Higher Education at the Berkeley campus of the University of California.

The centre is operated with Government and private foundation funds amounting to about \$500,000 a year. It is to have been the first unit in America devoted solely to the study of higher education. Professor Trow succeeds Professor Lyman Glenny.

Planning chair for Mr Ford

Former President Gerald Ford is to become chairman of the board of the Academy for Educational Development, a non-profit New York corporation that helps colleges and universities prepare long-range educational and financial programmes and advise local and state governments on education.

In his new post Mr Ford will help develop the academy's plans for domestic and international affairs.

Public colleges set to peg charges

Public universities in America will be able to hold down their tuition costs next year to virtually the same rate as they now charge. But private universities will again raise their fees in the autumn.

These are the findings of two recent surveys by the New York Times and the Collego Entrance Examination Board. They found that an average fee at four-year state universities will still be \$621, whereas fees at private colleges will go up 6.3 per cent to \$2,478.

Other costs, however, such as residence and board charges, will go up at almost all institutions, raising the cost of a university education in this country to a new record level. Resident students at the average four-year institution will pay \$3,005 at public colleges and \$4,905 at private colleges. The average cost of attending a public college rose from \$1,026 per full-time student in 1967 (current prices) to \$1,708 in 1975. Private college costs increased from \$2,134 to \$3,592.

The steep rise of the past few years have hit lower and middle-income families particularly hard, according to the Conference Board, a prestigious New York financial analysis body. Students whose families make between \$4,000 and \$10,000 dropped from 43 to 13 per cent of new university enrolments between 1967 and 1975. The under-\$4,000 and \$10,000 to \$15,000 families share remained about the same—3 and 27 per cent respectively. Households earning over \$15,000 on the other hand jumped from 26 to 57 per cent of the total.

For students of some of the more prestigious private universities fees alone will be over \$7,000 a year. In this category will be the Massachusetts Institute of Technology (\$7,950); Brown University (\$7,430); University of Pennsylvania (\$7,575); Columbia (\$7,600); and Princeton (\$7,495). Harvard, Yale and Sarah Lawrence passed the \$7,000 mark last autumn.

At the time that Dr Atkinson was outlining these proposals to the annual meeting of the Western Association of Graduate Schools in Albuquerque, New Mexico, the National Science Foundation published a report on the employment of women and minorities in science. This does not point an encouraging picture.

Women still make up only 6 per cent of the total number—1.7m—of employed scientists and engineers in America. In 1974 about half (89,000 out of 185,000) of all female scientists and engineers were not employed and were not seeking employment, compared with only 12 per cent (224,000) out of almost 2m male scientists and engineers not in the labour force.

About 5 per cent of all employed scientists and engineers of both sexes in 1974—79,000—were members of racial minority groups. But by far the largest number were Asians (who are not considered a disadvantaged minority group in this country). They represented almost the entire 5 per cent of employed scientists and engineers with Ph.Ds. Blacks constituted less than 1 per cent, and other minorities represented even smaller proportions.

Black scientists, however, had a very high unemployment rate—less than 1 per cent. For women scientists who were unemployed and looking for jobs the rate was 2 per cent. For males it was about 1 per cent.

Doubts over higher fees for foreign students

An intense debate has begun in Canada over the decision of provincial governments, Ontario and Alberta, to raise tuition fees for foreign students.

Initially, most universities in Ontario agreed, reluctantly, to impose differential fees, but several are now having second thoughts. The Council of Ontario Universities has been commissioned to make a full study of foreign students not only in Ontario universities but in all institutions throughout Canada.

The latest reports show that eight of Ontario's universities have now raised fees for foreign students. Brock, Guelph, Lakehead, Queen's, Ryerson, Waterloo, Wilfrid Laurier and Windsor.

The governing boards of three others—York, Western and Ottawa—were to raise fees, but this was strongly opposed by the university senate, and there are now moves to reconsider the decision.

At Trent University the motion to raise fees has been rescinded. McMaster has decided not to raise fees until July 1978.

At the three remaining universities—Carleton, Laurentian and Teredo—there has been strong opposition to higher fees in the universities' communities, and no decision has yet been made.

The issue has generated considerable controversy, aggravated by a lack of undisputed information. The government of Ontario told universities it had decided to impose differential fees because foreign students were costing the province a lot of money.

It left it up to the universities to implement the rise, but those that do not will not receive any money to cover the gap between the old tuition fee and the new one. It was estimated that universities not charging the higher fee could lose around \$200,000 in operating revenue in 1977-78.

Several universities dispute the amount the provincial government thinks it will save. Because of this, the Associated Universities and Colleges of Canada has commissioned the Council of Ontario Universities, together with Statistics Canada, to make a full report on foreign students, finding out how many there are, where they are from, where they are studying, and what they cost.

Mao's widow and her 'henchmen' face new charges

New attack on 'gang of four'

by John Gardner

The People's Daily published a report by the Chinese Academy of Sciences on March 9 violently attacking the activities of the "gang of four" in scientific work. The most serious charge against Mao's widow and her supporters concerns the devastating earthquake of last summer.

China has long been engaged in earthquake prediction work and, according to the report, relevant information was collected in the area of Peking, Tientsin and Tangshan last July. The "gang of four" and their "henchmen" in the Academy of Sciences, however, ignored the warnings of professional seismological observation posts, and amateur observation posts, and were responsible for the massive loss of life and destruction of property which occurred.

A further charge refers to interference in the Academy of Sciences, the body which guides and coordinates the activities of China's major scientific research institutes. It is claimed that they "kicked out" a number of veteran officials there, and even used "hugging" to collect information on them. Most intriguing of all, it is alleged that, early in 1976, they attacked plots for "tying up" the Academy of Sciences which were put forward by the highest level of the Party Central Committee.

These charges appear to refer to an earlier report on the Academy of Sciences prepared under the direction of Vice-Premier Teng Hsiao-ping between July and September, 1975. At that time, the moderate leaders in scientific and educational work were attempting to curb "ultra-leftist" excesses which were "holding back the hind legs" of the modernization of industry and agriculture, national defence, and science and technology. (The rapid development of the "four modernizations" was a pre-culturalist "Revolution" slogan revived by Premier Chou En-lai.)

Teng, a man noted for his outspokenness, took as his starting point his belief that "the Academy of Sciences is not an Academy of Chinese Sciences but a research prepared under his direction related to a crisis in Chinese sciences. Research workers trained since the Cultural Revolution were deemed to have an inadequate knowledge of theory which resulted in their 'homerling

Holland

More courses faced with increased quotas

from Lynn George

AMSTERDAM Despite protests and demonstrations by pupils and university students, the Universities Council, the highest advisory body to the government on university educational matters, has proposed a further round of admission cuts in over-subscribed courses for next year. This means that at least 4,000 applicants will be turned away from their first choice of course.

It also brings the total number of courses operating a quota system to 11. Subjects affected by the proposed cuts with the number of applicants for the 1977 academic year are as follows (figures in brackets indicate the number of available places): medicine: 3,850 (1950); dentistry: 760 (465); veterinary surgery: 750 (175); biology: 1,275 (895); pharmacy: 364 (272); agriculture: 930 (830); French: 479 (383); English: 734 (555); history: 1,185 (884); oratory: 525 (432); Dutch: 954 (883).

For a further title courses distribution committee have been prepared to decide in which of the eight universities successful applicants may study. German, Spanish, geology, pedagogy and anthropology among the subjects which will have these committees.

The new cuts in admissions mean that the temporary measure of the "quota" system will be in force for a seventh year. The universities, still smothering from whitened budgets and

staff "freezing" until at least 1980 regard the cuts as a necessary evil. Whether or not a faculty applies for a quota or the Universities Council has always been largely dependent on its capacity. Recently, however, the cost of courses plus the expected work pressure has been a consideration. So far the council has failed to recognize the need to have an admissions policy oriented to the labour market, as proposed by Dr Just van Kemnade, Education Minister of the now resigned Socialist-led coalition government.

The decision on the cuts, however, is not yet final. The second election will have to be held to accept an amendment to the temporary 1972 University Enrolment Act from Dr Ger Klein, Higher Education Secretary. This would give the secretary of the Universities Council, instead of the present practice of over-subscribed faculties not requiring a quota and then applying for extra funds.

The most serious university solution has been a voting issue which Dr Klein has failed to resolve. The introduction of the temporary University Enrolment Act in 1972 with its controversial electoral lottery procedure for candidates applying to over-subscribed courses was only intended to give the secretary a two-year breathing space to draw up a more permanent admissions policy. This has now proved to be "impossible" to implement, although, and once again application has been made to Parliament to extend the Act, this time until 1979.

Israel

Independent board set up in bid to end fees row

from our Correspondent

JERUSALEM An attempt to avoid the inevitable dispute over tuition fees, the Minister of Education and Culture has appointed a government committee to decide on tuition fees for the coming academic year. The committee is composed of two representatives each of the government, the universities and the National Union of Students. The chairman, a distinguished member of the Knesset (parliament) acceptable to all, has been given three votes on the committee.

All parties have agreed to accept the committee's decision. However, the NUS has in the past faced the refusal of student unions in Haifa and elsewhere to accept agreements signed by the NUS. They demand that fees be graded according to their income and at worst be linked to the cost of living index.

The annual report for 1975-76 of the Student Loan Fund—financed 50 per cent by government and 50 per cent by five banks—reveals that 7,014 loans were granted during the year, unlinked, at a low rate of interest and repayable over seven years beginning one year after completion of studies.

Provisional figures for 1976-77 show that while the total number of students in the universities has remained stable at about 81,000, the number of applications for loans topped last year's figure by almost 10,000, despite an increase in the rate of repayment. This is due to the 80 per cent increase in tuition fees and the rate of inflation which makes living more expensive.

The provisional results of a representative survey carried out by the Bureau of Statistics reveals that in 1975/76 60 per cent of students worked during the whole year and another 40 per cent worked sporadically. Thirty-six per cent worked in public and community services, 18 per cent in office work of various kinds, while 21 per cent worked as teachers. Eighteen per cent of the students paid no tuition fees and about 40 per cent received grants and/or loans. Work was the only source of income for 42 per cent; 21 per cent said that it was a mixture of income; 40 per cent received support from parents or relatives; and 44 per cent of 13 per cent came from the earnings of their spouses. Forty per cent of the students were married, one third of them married couples, both of themselves students. Nineteen per cent of the students lived in student hostels, 22 per cent in rented rooms, 29 per cent in flats owned by their parents (probably with a mortgage) and the remaining 30 per cent with their parents.

France

Two new universities are born

from Gny Neave

PARIS The university centre of Mulhouse (Haut-Rhin) and Le Mans are to be upgraded to full university status as from October 1979. Mulhouse was founded in 1975 and consists of three main faculties: arts, science and social sciences, as well as a university institute of technology, specialising in two-year applied science courses. It will now have two new faculties to deal with studies in mobile technology and chemical engineering. The latter have considerable importance for local industry, as Mulhouse is the centre of modern French textiles.

In what appears to be a novel arrangement between the secretary of state and local industry, 20 per cent of the running costs for the two new departments will be provided from industrial sources. The decision to upgrade the university centres at Le Mans to a university was announced last February by the secretary of state, Mme Alice Saunier-Bellet. In a letter to the local mayor, Mr Maury, the official of her decision was explicitly named. Mr Maury, who belongs to the Union Centraliste, was defeated at the second round of the recent municipal elections. As a university centre, Le Mans has built up a solid reputation in the area of the microelectronics industry and organic engineering. It has already drawn 3,500 students.

Union sues in salary dispute with new institution

The first thing a new university that has just been created in the city of Washington will have to do is appear in court. The University of the District of Columbia, which is only a few months old, is being sued by the National Education Association, the largest teachers' union in America, because it has suspended collective bargaining arrangements that existed in the colleges from which the university was formed.

The university has been established as a direct result of limited home rule for the District of Columbia (contiguous with the city of Washington) which was established in late 1973.

Last November the newly elected city council was able itself to introduce a Bill consolidating three separate higher education institutions in the district into a new university.

Iran police 'spying on students'

Accusations that a programme of cooperation with the Iranian Government, City University of New York, is being used by secret police to spy on Iranian students has led to widespread controversy, an official inquiry was held on the centre's new school programme.

The programme began with the return of Iranian students to the United States. It provided for the exchange of teachers with the National University of Iran, and the change of graduates students to a joint cooperative co-research mutual interest. There are 300 Iranian students in the College—though so far as has come over under the programme.

Some weeks ago, there were accusations that Secret Intelligence Service was using the programme to keep track of students and in particular using a "talent list" of Iranian students who had been recruited for university in Iran as a means of keeping an eye on them.

Queen's set up a committee to investigate the charges. The report recommended that the centre should be established, that a special committee be set up to oversee the programme, and that a list of graduates should be made in future. The report will continue.

The controversy has been led by a report published in THE TIMES (February 4) stating that it called the "hounding" of some American universities in the so-called "talent list" and a "talent list" of Iranian students who had been recruited for university in Iran as a means of keeping an eye on them.

The report also stated that the Iranian Government had been forced to close down too hastily.

South Africa New newspaper and more autonomy for African students

from Martin Eckstein

CAPE TOWN Higher education for blacks in South Africa has reached a double crossroads. The Association of African Educationists has proposed a Bill to provide greater autonomy for three black universities.

The education scheme, launched by the South African Council for Higher Education (SACHED), involves a weekly newspaper, People's College, and the establishment of nationwide study groups.

The 24-page educational newspaper will appear free each week with South Africa's largest black newspaper, Weekend World. It will provide practical courses as well as formal tuition to help students study through correspondence schools.

The cost of the scheme is estimated at R500,000 and according to SACHED director, Clive Nettle, also large South African companies, are providing assistance.

The study group scheme is being coordinated with People's College and aims to provide study material for students who do not complete courses because of lack of motivation, or who are unable to attend regular classes. These students establish their own study groups and help students to overcome any difficulties.

The Bantu Universities Amendment Bill now before Parliament will give greater autonomy in South Africa's three black universities.

Australia Practical doctors

from William Purvis

SYDNEY The new medical school at Flinders University, in South Australia, will introduce a unique medical course, "practical doctors". The curriculum moves away from traditional lectures towards a system geared to self-progress and problem solving.

Students will be able to vary their rate of progress according to ability or requirements. Some students may be able to complete the course in five years instead of six, while others may take longer.

The professor of medicine at the school, Professor John Chalmers, said the course was also designed to keep students interested and to expose them early to clinical contact with patients. And there would be much more emphasis on students doing the learning rather than teachers doing the teaching.

Professor Chalmers says the course will produce graduates who are people-oriented rather than technology-oriented. This does not mean they will be any less scientific in their thinking than graduates from conventional medical schools.

But the emphasis on early contact with patients and problem solving will mean a revised syllabus, a curricular outline with staff guiding small groups of students instead of lecturing to a mass of faces.

Professor Chalmers said that in conventional courses students are "fed" a mass of information which they then regurgitate in the exam room. The new course will be away with the emphasis on self-learning and problem solving. The latter have considerable importance for local industry, as Mulhouse is the centre of modern French textiles.

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LETTERS TO THE EDITOR

Technology and society

The case for legal disquiet

Although only peripherally within its terms of reference, the question of legal education is relevant to almost every topic under study by the Royal Commission on Legal Services. If, as is possible, the Commission recommends some alteration of the existing structure of the legal profession—whether by fusion or some less radical reorganization—the implications for legal education will be considerable. The same will be true if there is any move towards a national legal service employing salaried lawyers in deprived areas to fill the gaps left by private practitioners. Legal education finds itself therefore in some measure of a vacuum. The recommendations of the Ormrod Committee (which looked into the subject in detail in 1971) are being either speedily implemented or ignored and the proposals of the Royal Commission are still two years away.

Those who have the task of teaching law—the Law Society, through the College of Law, the Council of Legal Education (which serves the barristers' profession), the universities, and the polytechnics—have to base their thinking on the existing professional structure. The continued desirability of which may, of course, be confirmed by the Royal Commission. Even within that framework, however, to judge on evidence from a wide variety of sources, as well as from other public and private institutions, all is not well with legal education.

Ending East-West Czechmate

Few people will be surprised to learn that in Dr Husak's Czechoslovakia political acceptability is the sign and non of getting a good job. In particular, the freezing out of "class enemies" in the universities has continued unabated since Mr Dubcek was ousted in the wake of the 1968 Soviet invasion. What makes the developments now being revealed by Charter 77 so insidious (THESE, March 25 and April 1) is that the process is being extended to the present generation of university applicants. The young are having to pay for the "sins" of their elders.

Such basic abuses of human rights will be a natural target for the West at this summer's Helsinki meeting to monitor progress on the Helsinki agreement. But it would be a mistake to argue that this Czech approach is inevitable in a Soviet bloc state. Below the surface, the East today is scarcely more monolithic than the West. Poland, for example, houses the only private university in the social bloc; the Catholic University of Lublin. There are no campaigns against its graduates are discriminated against in the Polish army. It is almost automatic for Polish academics to get permission to visit the West (this is true for all Poland). The British Council recognizes this reality and for the purposes of its academic exchange programme it groups Poland in the northern rather than eastern European. Mr Gierk's for his part, is fond of setting up non-party committees of experts to advise the Government. Two such have been set up on the state of education and consumerism in a socialist society.

polytechnic courses were general in professional circles, at the expense of those who might wish to be lawyers in other spheres, such as central or local government. It is true that a law faculty, if it wants to obtain recognition of its law degree by the professional bodies, is obliged to teach the "core" subjects in its curriculum. This still leaves more than that number of subjects which need not be based on professional needs. It would be fair to suggest that all law faculties shy away from subjects of social and cultural relevance and interest. Too many, however, hide behind the excuse of having to provide fodder for the professions by providing island, boring, unimaginatively taught courses. There are still law faculties which do not teach as an integral part of their degree courses such fundamental important subjects as the law of the welfare state, including social security, the law of the European Community, or the law on employment and industrial relations. There is still, on much more scope for an integrated multidisciplinary approach, with the law as one element, to such areas as town planning, the environment, moral and legal education in the unfortunate dispute over Kent University's legal clinic has not set back that cause irreversibly.

Two other specific points made in evidence to the Royal Commission deserve attention. The first is that, where a case is not there ought to be fusion of solicitors and barristers, there is no case for continuing to provide largely separate education and training for the two branches, so obliging students to choose at least once, seemingly, if it is argued that the Ormrod recommendation for an all-graduate entry into the legal profession would have a significant number of potential lawyers of ability and intelligence. Both the law and the professions, and the Royal Commission might to treat them accordingly.

Clearing the air-waves

Sir,—I was intrigued by the statement in Dennis Marsden's review of Cycles of Discontinuity (THESE, March 25) that "there is no adequate discussion of the workings of government bureaucracies such as the School Broadcasting Council". As a member of what I presume is meant by Mr Marsden to refer to the Schools Broadcasting Council, I was unaware that it is a government bureaucracy. It is in fact an agency of the BBC, consisting of voluntary teachers and other educational interests and including among its 41 listed members one from the DES and one from the Inspectorate. Its function is to advise on the production of school programmes and allied matters. Its members, moreover, are appointed by their own parent organizations—I and there for the NUT.

Poly rector defended

Sir,—Unjustified, unsubstantiated and destructive attacks on persons and institutions have become commonplace in the media as rarely to strike a responsive note as detected by the knowledge that it invariably sinks and sticks (THESE, March 25). Frequently the persons making the attacks are inhibited because being elected by a relatively small minority group they have found a democratic system that they do not command sufficient broad support from their peers and others on various committees to impose their personal or ambitious views on everyone else.

Handicapped student

Sir,—The chances of an applicant securing a place on a course for which he is qualified or over-qualified are seriously endangered by the way in which other bodies take on matters such as grants, materials, aids, transport, residence, etc. Many colleges and universities are unable to ensure that their policies in regard to handicapped students are not pursued for the next few years.

Flower powerless

Sir,—I have in mind the four front-page photographs of the 1978 Edinburgh University flower power demonstration. I would you please not "dream" these flowers?

Jack Morrell on the scientific fortunes of Scottish universities at the beginning of the last century

The rise and fall of Scottish science

The celebration last year of the 25th anniversary of the founding of Edinburgh University's medical school confirmed the many famous Scottish contributions to science made by Scottish professors. That was true even of anatomy, a new science created between 1780 and 1830 in which accomplished devotees such as James Hutton were conspicuously active. Though Hutton has been enlarged as the father of modern geology, an acrimonious controversy about his work was energetically fanned by university academics such as Jameson, Playfair, Hutton and Leslie. But professional involvement in Edinburgh's scientific community was hardly new; after all, the Edinburgh Philosophical Society was created in 1737 largely by Professors Macmurdoch and Monro primus as a multiplicity for their university which, from the mid-1720s, had deliberately cultivated medicine and science as its chief vocations to students.

This staggering cohort continued in the 1820s to through the university's overcrowded classrooms in which they were taught by only 27 professors, of whom merely two were specialists. It represented a peak of student enrolment which was not to be equalled again until the 1870s. The most successful cynosure of students was Thomas Hope, whose chemical class was from 1810 to 1830 always greater in size than the total number of freshmen (about 400) admitted to either the whole of Oxford or Cambridge; in eight sessions more than 500 students per session witnessed the chemical drama he staged. From 1770 to 1830, then, Edinburgh certainly kept itself busy as a centre of medical education, especially through its medical and scientific courses, by satisfying the desires of persons and of those who had the capacity to patronise it. While Edinburgh attracted the largest student body, the environment at Glasgow also increased considerably: by 1800 it drew about 1,000 students of whom only about 200 were studying medicine; by the 1820s, however, the medical recruitment had risen to about 400.

King's College Aberdeen and St Andrews expanded more slowly during the early nineteenth century, attracting a total of about 700 between them. Though the Scottish upper classes, it seems, increasingly tended to send their children to the English universities, there was still a distinct northwards movement of English seeking medical and scientific enlightenment. Most chose Edinburgh, and a few Glasgow; hardly any ventured to St Andrews or Aberdeen, where science was taught mainly as part of general education. Not surprisingly the popularity of Edinburgh for medical and scientific training was associated with Scotland's largest scientific community which maintained publishing scientific societies; established proprietary journals wrote textbooks, and contributed to encyclopaedias, as well as to the famous Review of the Edinburgh Review. Where teaching at Oxford was largely done by transient college fellows, in the Scottish universities each subject was taught usually as a permanent responsibility by a specialist professor who enjoyed an institutional monopoly of his subject—though vulnerable at Edinburgh especially to severe external competition from flourishing private lecturers. For enrolment he relied mainly on class fees paid directly to him, and not to the university. Usually his basic salary was low, the extreme case until 1858 being five Edinburgh medical professors who received no salary whatsoever. Scottish professors, therefore, were usually aware of the financial need to be student orientated; their incomes mainly depended on



An engraving of 1787 showing Joseph Black, professor of chemistry and medicine at Edinburgh University, giving a lecture demonstration.

1790 in the arts faculty, and 12 by 1831 in the medical faculty. The main type of teaching was the single lecture course of about 120 hours per session, illustrated where appropriate by demonstrations of experiments and specimens. Though the lecture course, usually unassisted by either tutorials or verbal reading, was the staple teaching method, in some subjects additional help was employed. Faculty for clinical teaching in the hospitals remained outstanding in Britain until the 1820s; by that decade field trips in natural history and in its allied sciences, and students of the former could also use the university museum. Laboratory work in chemistry became available in 1823 in complement that in anatomical dissection; while the various student societies, especially the Royal Medical Society, provided a forum for evaluating professional rivalries and benefiting from peer-group criticism. In common with the other Scottish universities, Edinburgh's professional ideology was generally "teach first, research second". Proven teaching ability, as well as demonstrated scholarship and connection with the electors, counted heavily in appointments to chairs. When Charles Babbage canvassed in Edinburgh in 1819 for the mathematics chair, for example, he was surprised that no candidates were known by name to the university's liberal and professional, was caught in a secular context by lectures to non-residential students who had free access to single courses; and professors were remunerated by small salaries plus student fees. Medicine was as central to the success of University College that in its early years it had only two departments, the medical and the general; and by 1834 it had built the first hospital attached to an English university for the study of medicine and the medical subjects. As of Edinburgh, science was taught not only in medical courses, but also as essential liberal education and as desirable vocational preparation.

As the same times Edinburgh began to feel the effects of competition in teaching from institutions modelled on the link of organized research training at Edinburgh also became apparent. Though many professors voluntarily carried out publishable research, Edinburgh was hardly a centre of research. Its ethos: there was no equivalent in the "Athens of the North" to the institutional insistence on specialist research, discovery, and publication, associated with the new University of Berlin. Edinburgh's forte was the comprehensive popular scientific and medical lecture course, although one professor, Robert Jameson, did manage to produce a research paper for his school; and he also gave much tacit informal research advice and encouragement to prospective geologists, academics, and explorers. In the laboratory work, applied to the study of mineralogy, the only laboratory was able to respond to the competition provided by the Gorman universities in which practical laboratory work and scientific research schools were beginning to flourish. The most telling example of Scottish decline and German ascendancy is chemistry, a subject in which Scots were conspicuously active. In the last third of the eighteenth century Joseph Black had made Edinburgh chemistry world-famous through his simple and elegant lectures upon heat, and especially upon latent heat. Demonstrations, delivered in his prime to audiences of about 200, not surprisingly, his pupils came to occupy important university posts in Scotland and England, such as Hugh Boscawen (Glasgow), Reddox (Oxford), Tennant (Cambridge) and Garnett (Aberdeen's University, Glasgow). While Hope at Edinburgh followed in Black's footsteps by showing that his research and concentrating on teaching, Thomson estab-

The author's lecturer in the history and philosophy of science at Bedford University.



The author's lecturer in the history and philosophy of science at Bedford University.

On theoretical method

The Structure of Sociological Inference by W. Baldamus...

Gi Baldamus, recently retired from a tenacious few years as chairman of the Birmingham University department of sociology...

So reacted to his quantitatively minded colleagues, however, in what was basically a circumspect way, not simply condemning their philosophic naivety...

So he survived for many years, moving into the department of sociology, and eventually into its Chair, using his experiences to draw conclusions about what was always his main interest...

The perversity to which I refer comes out early in The Structure of...

Sociological Inference. At the very outset he tells us that the present position in social science "has its compensations".

This appears to leave little hope for a science of sociology, but after one or two still very perverse chapters in which he seems to be commencing his own sociology of knowledge...

Baldamus applies this parallel in a number of areas of empirical research and to several theoretical traditions in order that he should be able to research something not about research methods or about theory...

empirical inquiry, he has little time for the work of the Cambridge school of industrial sociology and seems to suggest that it suffers from all the defects that Weber's industrial researches did...

The main part of the book deals with the methods employed by Parsons representing functionalism, Lazarsfeld representing the survey tradition, and modern Marxism...

The apparently second turn on the dichotomous division and ranking of terms, Baldamus's view is that:

Provided that symmetric dichotomous schemes are limited to combining two dichotomies at a time, the distinctive nature of new theoretical inferences derives in fact from the opposition of cumulative ranking trials and the restriction imposed by the available reservoir of dualistic concepts.

This is to say we take two dichotomies together and try out an analysis in which first one and then the other is given primacy of ranking.

The question which arises is "why should this be?" Baldamus gives two answers...

John Rex

Ideal types and real people

The Dual Vision: Alfred Schütz and the Myth of Phenomenological Social Science by Robert A. Gorman...

The merit of Dr Gorman's study is that it makes visible a fault in Alfred Schütz's philosophy of social science, which might otherwise have escaped notice.

But, as Gorman clearly shows, this predicament is inadequate. In sum, the question we are to understand is which of our friends have to depend on a typification?

If there is a valid response to the phenomenological predicament then it is, that even in our self-

Schütz sought to evade this picture of human science, and in particular to vindicate the ideal type as found in Max Weber.

But such limitations, along with some weak history and the absence of any sustained anthropological perspective on the Virgin as myth and cult, do not leave merely a middle-class reader for the Virgin as myth and cult...

What the author proposes instead is a form of social inquiry which would combine an ostentatious respect for individuality with a Marxist concern for liberation.

Philipp Pettit



A poster depicting women's wartime fashions, from 1914-18 by Arthur Marwick, published by Fontana at £2. Crown Helm in hardback at £6.95.

Mary mother mild

Alone of All her Sex: The Myth and the Cult of the Virgin Mary by Marina Warner...

Miss Warner's study should sell very well indeed, with such fashionable ingredients as religion, myth, history, sex and feminism...

But what carries this book beyond mere popular appeal is the intellectual and erudite erudition with which the author pursues her inquiry...

Among the major writers of the Augustan age, only Gibbon has been more seriously neglected by modern critics than have the subjects of these two books.

Graham Harvey

Unfashionable masterpieces

Tablet Smollett: A Study in Style by Danian Grant...

Among the major writers of the Augustan age, only Gibbon has been more seriously neglected by modern critics than have the subjects of these two books.

Grant's book has some characteristics which may disconcerting for Smollett's admirers and will reduce its efficacy as a plea to the unconverted.

David W. Lindsay

Speculator in verse

Coleridge's Poetic Intelligence by John Beer...

The Romantic period was characterized by an extraordinary ferment of ideas, a riot of semi-scientific, semi-philosophical speculation...

On the whole, these critical questions are not the ones Dr Beer unravels here. He suggests, this is largely a neoclassical book, an intellectual biography of S. T. Coleridge...

However, this is not the whole story. Beer's book is somewhat more than an intellectual biography, more than an attempt to show that Coleridge's speculations are relevant to his poetry...

rated by later scientific, psychological, and philosophical developments, it hardly matters what the cribbed from English thinkers, or German, and what he arrived at independently. What matters is what these notions contributed for good or ill to his poems.

Now, the exposition of the contemporary intellectual background and what Coleridge took from it is thorough and clear, as is his place in the poetry, too, is lucidly demonstrated.

Beer does argue, plausibly that Coleridge's incessant pursuit of pseudo-science and metaphysics did help to shape what might otherwise have been an amorphous sensibility, and did help him to express consistency and morality more than has been difficult to articulate.

Allan Rodway

Poetry readings

Words Into Rhythm by D. W. Harding...

One could say, ungenerously, that this densely packed, sensitive and rewarding book was written to one recipe for success.

Professor Harding combines the qualities of a professional psychologist with those of one who has long been known as a perceptive literary critic...

John Holloway

noire) rely on in their seeming efforts to get the poet back into their schoolroom.

English poetic rhythms; and many have written in the field with little merit or much self-confidence.

But what carries this book beyond mere popular appeal is the intellectual and erudite erudition with which the author pursues her inquiry...

John Rex

British Academy

Proceedings of the British Academy, volume LXI, 1975, is published by Oxford University Press at £14.50.

Reviewers

Among the week's reviewers: R. H. Campbell is professor of economic history at the University of Stirling.

David W. Lindsay, author of English Poetry 1700-1780, is lecturer in English at the University College of North Wales, Bangor.

C. G. Jung The Symbolic Life

Miscellaneous Writings

Translated by R. F. C. Hull

Originally planned as a brief final volume in the Collected Works, The Symbolic Life has become the most ample volume in the edition.

Dionysos

Archetypal Image of Indestructible Life

C. KERENYI

Translated from the German by Ralph Manheim

In myth and legend, in visionary experience and ritual representation, the Greeks possessed a complete expression of Indestructible Life, the essence of Dionysos.

Routledge & Kegan Paul

39 Store Street, London WC1

10 x 7 1/2 inch, 512pp, 146 illustrations - £20.00

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Universities

UNIVERSITY OF DAR ES SALAAM—TANZANIA

Applications are invited for the following posts in DEPARTMENT OF MANAGEMENT AND ADMINISTRATION:

1. PROFESSOR/ASSOCIATE PROFESSOR IN MANAGEMENT & ADMINISTRATION (FINANCIAL MANAGEMENT)

Candidates must possess a Doctorate in Business Administration specialising in Financial Management. They must have several years of teaching experience at a University or equivalent. Consideration will be given to those with specialisation in Financial Management, Advanced and Business Finance and Financial Institutions and Foreign Trade Finance.

2. PROFESSOR/ASSOCIATE PROFESSOR IN MANAGEMENT AND ADMINISTRATION (ACCOUNTING)

Candidates must have Ph.D. or M.A. in Business Administration and should have teaching experience at a University or equivalent. Consideration will be given to candidates with experience in teaching Auditing at University level or equivalent.

3. ASSOCIATE PROFESSOR IN MANAGEMENT & ADMINISTRATION (MANAGEMENT)

Candidates must possess a Doctorate in Business Management, specialising in Quantitative Methods. They must have several years teaching experience at University level. Consideration will be given to candidates with teaching experience in Quantitative Methods, Statistical Method, and Operations Research.

4. SENIOR LECTURER/LECTURER IN MANAGEMENT AND ADMINISTRATION (COMMERCIAL LAW & LABOUR LAW)

Candidates must have a Ph.D. or M.A. in Business Administration and should have teaching experience at a University or equivalent. Consideration will be given to those with long experience in teaching Commercial Law, Labour Law and Legal Aspects of International Trade and Investments; at University level and its equivalent.

5. SENIOR LECTURER/LECTURER IN MANAGEMENT AND ADMINISTRATION (ACCOUNTING)

Candidates must possess a Ph.D. or M.A. in Business Administration. They must have several years' teaching at University level or equivalent institution. Consideration will be given to candidates with specialisation in Intermediate Accounting, Cost Accounting and Advanced Accounting. Salary Scale: Professor T24,000 p.a., Associate Professor T23,070-T23,870 p.a., Senior Lecturer T22,070-T23,720 p.a., Lecturer T22,320-T22,970 p.a., (T21=£1.30 sterling). The British Government may supplement salaries in the range £2,800-£4,000 p.a. (including for married couples or £1,800-£2,000 p.a. (including for single applicants) and provide children's education allowances and holiday visit passages. FSSU Family passages: biennial overseas leave. Detailed applications (two copies), including a curriculum vitae and naming three referees, should be sent by airmail not later than 28 April, 1977, to the Chief Academic Officer, University of Dar es Salaam, PO Box 28091, Dar es Salaam, Tanzania. Applicants resident in UK should also send one copy to Inter-University Council, 80/81 Tottenham Court Road, London W1P 0DT. Further particulars may be obtained from either address.

UNIVERSITY OF MALAWI

Applications are invited for LECTURESHIP IN PSYCHOLOGY

In Department of Human Behaviour. Applicants should have a Ph.D. in Psychology and some relevant teaching experience. Preference will be given to those with higher Degree qualification who will be an advantage. The appointee will be required to teach degree students. Salary scale (including superannuation) K1,100-K1,174. The British Government is prepared to provide salary supplementation for this post. There is a University addition of K220 p.a. for those not qualifying for supplementation. Overtime of 10 per cent. 25 per cent. Superannuation scheme transferable with FSSU. Family passages: various allowances. Biennial overseas leave; housing. Detailed applications (2 copies) including curriculum vitae and naming three referees should reach the Acting Registrar, University of Malawi, University Office, PO Box 29, Zomba, Malawi, by 28 April, 1977. Applicants in the UK should send a copy of the application form to the Inter-University Council, 80/81 Tottenham Court Road, London W1P 0DT.

CAMBRIDGE COLLEGE

Applications are invited from suitably experienced and qualified men and women for the post of TUTOR IN THE EDUCATION OF CHILDREN WITH LEARNING DIFFICULTIES

As one of a team of three tutors in this field, the Institute provides full-time diploma courses at Cambridge and Chelmsford and part-time courses based at present at Hatfield and March. The person appointed to this post will be based in Cambridge and will be responsible for the full-time courses in Cambridge and have tutorial responsibility for this group of students and will be responsible for the part-time courses in March. Salary in the range £4,407-£7,087. Further particulars from the Registrar, Cambridge Institute of Education, Shaftesbury Road, Cambridge CB2 3RQ, to whom application forms should be forwarded by April 29, 1977.

UNIVERSITY OF NAIROBI—KENYA

Applications are invited for the following posts in the INSTITUTE FOR DEVELOPMENT STUDIES

1. SENIOR RESEARCH FELLOW/RESEARCH FELLOW

(Rural Development Economics/Biologist) Applicants should hold a Ph.D. or equivalent in Economics or Rural Sociology, with considerable research experience particularly relating to the rural economy in Kenya or some similar country. Appointees will be expected to take the major initiative in an Institute research programme on income distribution, equity and growth, particularly as it relates to the rural sector. It is anticipated that the appointee will undertake applied research and an analysis of social and economic policies and programmes affecting rural areas, with particular regard to income distribution, poverty and rural development. It is anticipated that the appointee will be expected to take the major initiative in an Institute research programme on income distribution, equity and growth, particularly as it relates to the rural sector. It is anticipated that the appointee will undertake applied research and an analysis of social and economic policies and programmes affecting rural areas, with particular regard to income distribution, poverty and rural development. It is anticipated that the appointee will be expected to take the major initiative in an Institute research programme on income distribution, equity and growth, particularly as it relates to the rural sector. It is anticipated that the appointee will undertake applied research and an analysis of social and economic policies and programmes affecting rural areas, with particular regard to income distribution, poverty and rural development.

2. SENIOR RESEARCH FELLOW/RESEARCH FELLOW

(Economist) Applicants must have a Ph.D. or equivalent in Economics and should have considerable research experience in Kenya or some similar country. Appointees will be expected to undertake research in conjunction with the Institute's programme. In particular, he or she will be involved initially with a major series of studies of growth, income distribution and welfare. Additional activities and research topics will be selected in consultation with the Institute with its research priorities.

3. SENIOR RESEARCH FELLOW

Applicants should be experienced economists with a particular interest in the topic of income distribution, equity and economic growth in countries such as Kenya. They should have a Ph.D. in Economics or related field and have considerable research experience relating to the topic. It is anticipated that the appointee will take the major initiative in mounting a study to determine in what ways a more equitable distribution of income will affect the character and the rate of economic growth in Kenya. The study is expected to synthesise existing knowledge of the issue, initiate well found applied research drawing upon data from the Central Bureau of Statistics and other sources and relate to relevant social and economic policies in Kenya.

Salary scales: Senior Research Fellow K22,772-K23,000 p.a.; Research Fellow K21,500-K22,000 p.a. (K21=£1.33 sterling). The British Government may supplement salaries in the range £2,800-£3,750 p.a. (including for married couples or £1,800-£2,078 p.a. (including for single applicants) and provide children's education allowances and holiday visit passages. FSSU Family passages: various allowances. Detailed applications (two copies) including a curriculum vitae and naming three referees should be sent by airmail not later than 2 May, 1977, to the Registrar (Recruitment and Training), University of Nairobi, PO Box 29, Nairobi, Kenya. Applicants resident in UK should also send one copy to Inter-University Council, 80/81 Tottenham Court Road, London W1P 0DT. Further particulars may be obtained from either address.

KENYATTA UNIVERSITY COLLEGE—KENYA

(A constituent college of University of Nairobi)

Applications are invited for the following posts in

EDUCATIONAL COMMUNICATION and TECHNOLOGY DEPARTMENT

PROFESSOR:

Applicants should have a Ph.D. in Educational Communication and Technology and have extensive teaching and research experience. Ability to initiate and direct under-graduate and post-graduate education is essential. Preference will be given to those with qualifications and experience in the utilization of educational communication including formulation and design of educational resources.

LECTURER:

Applicants should have a good degree, preferably in Science, and a postgraduate professional qualification. Science teaching experience at Secondary School level or above is essential. Preference will be given to those with qualifications and experience in educational communication relating to design and utilization of educational resources for Science Education. Appointees will be expected to teach introductory courses in Educational Communication and Technology, in relation to Science Education.

Kenya University College deals with Teacher Education as its major preoccupation. Experience and qualification in teacher education are therefore a prerequisite, lack of which does not necessarily lead to disqualification. All members of the Academic Staff are expected to participate in the supervision of Teaching Practice. Salary Scales: Professor K24,500-K25,100 p.a. (K24=£1.33 sterling); (K23=£1.30 sterling). The British Government may supplement salaries in the range £2,800-£3,800 p.a. (including for married couples or £1,800-£2,000 p.a. (including for single applicants) and provide children's education allowances and holiday visit passages. The terms of service include subsistence allowance of £500 or FSSU, and a non-contributory medical scheme, and family passages. Detailed applications (2 copies) including a curriculum vitae (appointees should give three names of Academic referees and their addresses and at the same time request them to send their references direct to the Registrar without delay) should be sent by airmail not later than 20 April 1977 to the Registrar, Kenyatta University College, PO Box 424, Nairobi, Kenya. Applicants resident in UK should also send one copy to the Inter-University Council, 80/81 Tottenham Court Road, London W1P 0DT. Further particulars are available from either address.

KENYATTA UNIVERSITY COLLEGE—KENYA

(A constituent college of University of Nairobi)

Applications are invited for the following posts in the Faculty of Science.

1. SENIOR LECTURER IN CHEMISTRY DEPARTMENT

Applicants should hold a Ph.D. in Chemistry and have considerable experience in University teaching and research. Appointees will be expected to teach undergraduates, supervise post-graduate students and carry out research. Any specialisation in Chemistry will be considered.

2. LECTURER IN MATHEMATICS DEPARTMENT

Applicants should hold a Ph.D. in Pure Mathematics and Statistics and have University teaching and research experience.

3. LECTURER IN BIOLOGY DEPARTMENT

Applicants should hold a good higher degree in Biological Sciences. Preference will be given to candidates having teaching experience. Appointees will develop and teach courses in various aspects of Biological Sciences including those related to Home Economics and Physical Education. Research in a relevant field will be undertaken. Kenyatta University College deals with Teacher Education as its major preoccupation. Experience and qualification in teacher education are therefore a prerequisite, lack of which does not necessarily lead to disqualification. All members of the Academic Staff are expected to participate in the supervision of Teaching Practice.

Salary Scales: Senior Lecturer K22,772-K23,000 p.a.; Lecturer K21,500-K22,000 p.a. (K21=£1.33 sterling). The British Government may supplement salaries in the range £2,800-£3,750 p.a. (including for married couples or £1,800-£2,078 p.a. (including for single applicants) and provide children's education allowances and holiday visit passages. The terms of service include subsistence allowance of £500 or FSSU, and a non-contributory medical scheme, and family passages. Detailed applications (2 copies) including a curriculum vitae (appointees should give three names of Academic referees and their addresses and at the same time request them to send their references direct to the Registrar without delay) should be sent by airmail not later than 20 April, 1977, to the Registrar, Kenyatta University College, PO Box 424, Nairobi, Kenya. Applicants resident in UK should also send one copy to the Inter-University Council, 80/81 Tottenham Court Road, London W1P 0DT. Further particulars are available from either address.

UNIVERSITY COLLEGE CORK

Department of Accounting—Full-time Appointment(s)

The Governing Body invites applications for full-time post(s)—one or two appointments may be made—as Assistant Lecturer/College Lecturer in the Department of Accounting. The appointment(s) will be made at one of the levels mentioned according to the qualifications and experience of the successful candidate(s).

The salary scales are: College Lecturer, £4,720 to £5,665/£5,940 to £7,119 per annum; Assistant Lecturer, £4,052 to £4,431 per annum.

Application form and further details of the post may be obtained from the undersigned.

Latest date for receipt of applications is Friday, April 22, 1977.

M. F. Keefe, Secretary.

THE NATIONAL INSTITUTE FOR HIGHER EDUCATION LIMERICK IRELAND

LECTURER DIGITAL ELECTRONICS

(Two posts, AS4-016 and AS4-030)

Person appointed will be involved in the operation and development of Degree and Diploma Programmes in Electronic Engineering and also in other related programmes. The Institute has excellent laboratory facilities in digital electronics. A funded research programme is in progress in microcomputer applications. Candidates should have significant relevant research/development experience and an appropriate degree or equivalent qualification.

This is an excellent opportunity to work in a stimulating environment on a new riverside campus.

Salary: £5,487 to £7,018.

Additional annual allowances of £100 per marriage, and £70 per child, are payable with other research. Candidates with good honours degree not below Second Class Honours (Upper Division), or its equivalent with adequate teaching or research experience, will be considered.

Application materials available from the Personnel Office, National Institute for Higher Education, Limerick, Ireland, to be completed and returned by Friday, April 25, 1977.

UNIVERSITY OF BENIN, BENIN CITY, NIGERIA

ACADEMIC STAFF VACANCIES, 1977

Applications are invited from suitably qualified candidates to fill vacancies at the University.

The University of Benin, like the other universities in Nigeria, is a Federal Government university. It is a young and fast-developing university and provides all the opportunities and rewards of pioneering effort. There are currently just under 2,000 students enrolled in the Schools/Faculties of Medicine, Dentistry, Pharmacy, Engineering, Science, Education and Arts and Social Sciences.

For the 1977/78 session, staff vacancies exist in the following departments:

1. SCHOOL OF MEDICINE

(a) Positions Vacant:

Professor/Associate Professor or Reader; Senior Lecturer/Lecturer/Research Fellow

(b) Fields of Specialization Required:

Anesthesiology; Radiology; Physiology; Physiological Chemistry; Anatomy; Child Health (Paediatrics); Obstetrics & Gynaecology; Medicine (Physiology); Surgery (Chest Surgery, Neurosurgery, Otorhinolaryngology, Ophthalmology, Orthopaedics, Urology); Community Health (Medical Epidemiology—must be medically qualified); Public Health Administration/Health Planning; Biostatistics/Medical Entomology—may not be medically qualified; Mental Health (Psychiatry and Clinical Psychology); Pathology (Mould Anatomy, Immunology, Human Microbiology, Chemical Pathology).

2. SCHOOL OF DENTISTRY

(Note—This school was only recently established and admitted its first students in September, 1976.)

(a) Positions Vacant:

Professor/Associate Professor or Reader; Senior Lecturer/Lecturer/Research Fellow

(b) Fields of Specialization Required:

All areas of Dentistry.

3. SCHOOL OF PHARMACY

(a) Positions Vacant:

Professor/Associate Professor/Reader; Senior Lecturer/Lecturer/Research Fellow; Assistant Lecturer

(b) Fields of Specialization Required:

Clinical Pharmacology and Therapeutics; Pharmacology; Pharmaceutics; Pharmaceutical Chemistry (Physical and Organic); Pharmaceutical Technology; Pharmacognosy; Pharmaceutical Microbiology.

4. DEPARTMENT OF BUSINESS STUDIES

(a) Position Vacant:

Professor/Assistant Professor or Reader; Senior Lecturer/Lecturer/Assistant Lecturer

(b) Fields of Specialization Required:

Accounting, Personnel Administration, Business Administration, Business Finance, Economic and Business Statistics.

5. VICE-CHANCELLOR'S OFFICE—PLANNING AND DEVELOPMENT UNIT

Positions Vacant:

1. Senior Planning/Planning Officer (Academic)

Duties: To translate the academic objectives of the University into student and staff projections, manpower training programmes, their financial implications, etc., and in cooperation with the physical planning section to formulate an integrated development plan of the University and to ensure its implementation.

Qualifications:

Recognized University Degree, preferably with Statistics, with specialization and/or experience in Educational/Institutional Planning.

Salary: Officers will be made in the salary range Grade Level 09-12, depending on qualifications and experience.

2. Planning and Development Officer (Land-use)

Duties: To assist in the planning of, and to supervise, the layout and Land-use Development of the permanent site of the University within the context of an approved master plan.

Qualifications: A recognized University Degree or equivalent professional qualifications in Town Planning, Horticulture, Estate Planning/Management, with experience in Land-use Planning.

Salary: This will be a contract appointment of two or three years. Officers will be made in the salary range Grade Level 09-11, depending upon qualifications and experience.

GENERAL QUALIFICATIONS REQUIRED OF APPLICANTS

(a) Professor/Associate Professor/Reader

High academic qualifications in the relevant field, preferably a Ph.D. Several years of teaching, research or professional experience in a University or comparable institution complemented by adequate scholarly publications. Ability to initiate and develop research projects and to supervise post-graduate research programmes. Some administrative experience.

(b) Senior Lecturer/Senior Research Fellow

Sound academic qualifications, preferably with a Ph.D. Not less than five years of teaching, research or equivalent professional experience in a University or comparable institution. Ability to initiate and develop research projects, supported by evidence of scholarly publications. Experience in directing academic group discussion will be an advantage.

(c) Lecturer I and II/Research Fellow

Sound academic or equivalent professional qualifications with, preferably, a higher degree. Level of appointment will depend on teaching or research experience in a University or comparable institution. Evidence of scholarly publications will be an advantage.

(d) Assistant Lecturer/Assistant Research Fellow

A Master's degree with demonstrable ability or potential for teaching and research. Candidates with good honours degree not below Second Class Honours (Upper Division), or its equivalent with adequate teaching or research experience, will be considered.

SALARIES AND CONDITIONS OF SERVICE

(a) Salary: Professor/Director: N11,208-N12,420; Associate Professor or Reader: N8,088-N9,828.

Senior Lecturer, Senior Research Fellow

Grade Level 13: N7,784-N8,724

Lecturer or Research Fellow Grade I

Grade Level 11: N6,444-N8,984

Lecturer or Research Fellow Grade II

Grade Level 10: N5,480-N8,432

Assistant Lecturer, Assistant Research Fellow

Grade Level 09: N4,388-N5,340

(Note: N1=£0.8377 (British Sterling); N1=US\$1.6846 subject to changes in exchange rates).

(b) Other Conditions:

The appointment of Professor is to retiring age which is normally 60 years; for other posts below Professor appointment is normally on probation which may be confirmed after two or three years of satisfactory service. All posts are pensionable. But contract appointments for specific periods can be arranged in which case the staff member will be eligible for a "Contract Addition" equivalent to 25 per cent of basic salary.

Benefits include payment of a car allowance; provision of furnished accommodation or payment of rent allowance in lieu thereof; passages for appointee and family (wife and up to five children) on appointment. Local leave allowances paid annually, end-of-overseas leave passages every other year for expatriates. For medically qualified staff with Consultant status.

Note: In respect of Clinical appointments, candidates must possess a good medical degree plus the appropriate postgraduate professional Diploma or degree registerable or registered with the Nigerian Medical Council. For appointment to the School of Pharmacy, Pharmacy Diplomas may be required to be registered with the Pharmacy Board of Nigeria.

(c) Method of Application:

Candidates are required to submit three typewritten copies of their applications giving the following information: Full Name, Date and Place of Birth; Nationality and Permanent Home Address; Current Postal Address;

Post for which Applicant wishes to be considered; Marital status; number of children (with ages); Academic and Professional Background—with qualifications and experience;

Working experience; Present employment; Status and Salary;

Research and Publications (two copies of not more than six of them to be supplied if available); Non-Academic Interests/Extra-Curricular activities; Passport Number (if any) with Date and Place of issue; Name and Address of three referees;

Passport Photographs should be included with the applications.

Applications are to be forwarded to:

The London Representative
University of Benin
8 Halfam Street
London W1N 5LF

Closing Date: 21st April, 1977.

29th March, 1977.

E. O. AKWUKWUMA,
Registrar.

الجامعة

**KINGDOM OF SAUDI ARABIA
UNIVERSITY OF RIYAD
FACULTY OF ARTS**

Applications are invited for appointments to positions of Professors, Associate Professors, Assistant Professors and Lecturers starting Academic Year 1397/98 (1977/78). Applicants must be native speakers of Arabic (except for the Department of English):—

Position	Qualifications	Department	Specialisation
PROFESSORS	Either, holding Ph.D plus 5 years of subsequent university teaching experience as Associate Professor plus publications acceptable to Riyad University. OR, holding Ph.D. plus Full Professor title already conferred by a recognised and accredited University.	Arabic	Grammar and Syntax
		Geography	Bio-Geography and Soils* (1)
ASSOCIATE PROFESSORS	EITHER, holding Ph.D. plus 5 years of subsequent university teaching experience plus publications acceptable to Riyad University. OR, holding Ph.D. plus Associate Professor title already conferred by a recognised and accredited University.	Geography	Economic Geography* (1) Regional Geography* (1)
		History	European History (1)
		Mass-Communication	Journalism (History of Journalism) (1) Broadcasting (Radio) and T.V. (1)
		Mass-Communication	
		Sociological Studies	Sociology (1)
		Arabic	Grammar and Syntax (1) Ancient Arabic Literature (1) Rhetoric and Criticism (1) Literature and Criticism (1) Philology and Phonetics (1)
		Arabic	
		Arabic	
		Arabic	
		Arabic	
ASSISTANT PROFESSORS	Ph.D.	History	Islamic Archeology (1) Ancient History and Archeology (1) Archeology (1) Ancient Civilizations (1) Islamic Arts (1) Medieval Islamic History (1) Islamic History (1) Modern Arabic History (1)
		History	
		History	
		History	
		History	
		Mass-Communication	Advertising (Art)* (1)
		Mass-Communication	
		Sociological Studies	Sociology (1)—Female Social Work (1)—Female
		Arabic	Ancient Arabic Literature (1)—Female Grammar and Syntax (1)—Female
		Geography	Physical Geography (1)—Female
LECTURERS	M.A.	History	Medieval Islamic History (1)—Female Islamic History (1)—Female
		History	
		History	European History (1)—Female Modern Arabic History (1)—Female
		History	
		Mass-Communication	Journalism (Journalistic Writing) (1) Mass-Media (International and Theories) (1) Public Relations (1) Broadcasting and T.V. (1)
		Mass-Communication	
		Sociological Studies	Social Work (1) Social Work (1)—Female
		English Language and Literature	Modern Novel and Earlier Periods** (1)—Female Modern Poetry and Earlier Periods** (1) Modern Poetry and Earlier Periods** (1)—Female Drama—(preferably) in Post-Renaissance Drama, excluding Modern Drama** (1) Drama—(preferably) in Post-Renaissance Drama, including Modern Drama** (1)—Female
		English Language and Literature	
		English Language and Literature	
TEACHING ASSISTANTS	B.A. (at least Grade Very Good)	Arabic	Grammar and Syntax (1)—Female
		Geography	Physical Geography (1)—Female Human Geography (1)—Female
LECTURERS	M.A.	English Language and Literature	Linguistics (1)—Female
		Geography	Geography (1)—Female Cartography (1)—Female

(1) Applications should be sent (Registered) with curriculum vitae, testimonials and academic qualifications (unreturnable) and certified by the Foreign Ministry and the Saudi Embassy and marked "Employment Application" to

The Dean of the Faculty of Arts,
P.O. Box 2456, University of Riyadh,
Riyad, Saudi Arabia

(2) Only applications received within one month from the date of publication of this notice will be considered.
(3) Candidates chosen will only be notified at their enclosed address.

Saudi Arabia

**COLLEGE OF MEDICINE AND ALLIED SCIENCES
KING ABDULAZIZ UNIVERSITY
JEDDAH SAUDI ARABIA.**

**TEACHING STAFF FOR
PRE-CLINICAL SUBJECTS**

The rapidly expanding Medical College of the King Abdulaziz University, Jeddah, invites applications, from both MEN & WOMEN, in the subjects listed below:

ANATOMY:

Assistant Professor
Demonstrator **FEMALE**

PHYSIOLOGY:

Professor or Associate Professor
Demonstrator **MALE & FEMALE**

BIOCHEMISTRY:

Professor or Associate Professor **MALE**

HISTOPATHOLOGY:

Associate or Assistant Professor
Professor or Associate Professor **MALE FEMALE**

HAEMATOLOGY:

Professor or Associate Professor
Associate or Assistant Professor **MALE FEMALE**

CHEMICAL PATHOLOGY:

Associate or Assistant Professor **MALE & FEMALE**

MEDICAL MICROBIOLOGY:

Associate or Assistant Professor **MALE & FEMALE**

IMMUNOLOGY:

Associate or Assistant Professor **MALE & FEMALE**

SEROLOGY:

Assistant Professor or Lecturer **MALE & FEMALE**

PARASITOLOGY:

Assistant Professor or Lecturer **FEMALE**

PHARMACOLOGY:

Professor or Associate or
Assistant Professor **MALE & FEMALE**

BIOLOGY:

Professor, Associate and
Assistant Professor **MALE & FEMALE**

CHEMISTRY:

Associate or Assistant Professor
(Physical) **FEMALE**

Associate or Assistant Professor
(Organic) **FEMALE**

QUALIFICATIONS:

Applicants for teaching positions must have obtained a higher qualification (Ph.D or its equivalent) and suitable experience. Applicants for Clinical posts must be medically registered. Medically qualified applicants for the posts in Bio-chemistry and Pharmacology will be preferred. Applicants for the post of Demonstrator should have suitable qualification and experience.

SALENT FEATURES OF TERMS & CONDITIONS:

CONTRACT: Contract is annually renewable with mutual consent.

DATE OF JOINING:

Successful candidates will be required to join by

15th SEPTEMBER, 1977.

PAY SCALES (In Saudi Riyals)

No Income Tax. Currency in the Kingdom of Saudi Arabia is freely convertible and transferable. (S.R. 0.12 equivalent to £1.00. S.R. 3.54 = U.S. \$1.00 approx. as per current rate).

Post	Monthly Salary	Annual Housing Allowance	Monthly Medical Allowance	% of the basic salary
Professor	6,000-200-4,400	20,000	10%	
Associate Professor	4,800-200-3,600	15,000	15%	
Assistant Professor	3,600-200-2,400	10,000	20%	
Lecturer	2,200-155-5,525	11,000	25%	
Demonstrator	2,400-145-4,775	10,000	20%	

MEDICAL ALLOWANCE:

Payable to those only holding medical qualifications.

CLINICAL ALLOWANCE:

Fifty per cent of the basic salary is payable to those assigned clinical duties besides teaching.

NOTE:

Medical & Clinical Allowances shall not be paid simultaneously.

HOUSING:

Free accommodation (apartment) will be provided. In case accommodation is not available Housing allowance as per entitlement would be granted, plus 50% of the Housing Allowance as Furnishing Allowance. Furnishing Allowance is paid only once in the whole period of service.

GRATUITY:

A gratuity of half a month's salary per year is payable on proper termination of the Contract provided the period of employment has been 2 years or more. Should the period of service exceed five years the gratuity shall be one month's salary for each year, including the first five years.

VACATION:

60 days annually.

TRAVEL:

Maximum four air tickets (First Class for Professors and Economy Class for the rest) are provided to and from the place of residence for the appointee including dependants.

MEDICAL CARE:

Free medical care is available to the contractees and their dependants in Government Hospitals, within the Kingdom.

APPLICATIONS & LAST DATE:

Applications, in English, including detailed curriculum vitae, one latest passport-size photograph and names/addresses of two referees, clearly indicating the subject and position applied for, both on the application and envelope, should reach:

The Dean, College of Medicine & Allied Sciences, King Abdulaziz University, P.O. Box 1540, Jeddah, Saudi Arabia.

The last date of receipt of applications is 1st MAY, 1977.

Selected applicants will be contacted in about a month after receipt of applications.

Saudi Arabia

1397/98